

# JENKINS VALVES

AND

MECHANICAL RUBBER GOODS



CATALOGUE No. 10



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*R. Q. Rankin*  
*Jan 1 1936*

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JENKINS BROS., LIMITED



# JENKINS VALVES

*and*

MECHANICAL RUBBER GOODS



JENKINS BROS., LIMITED

HEAD OFFICE AND FACTORY: 617 St. Remi Street, Montreal, Que., Canada

FOUNDRY DIVISIONS: Lachine, Que., Canada

*Branch Offices and Warehouses:*

TORONTO, WINNIPEG, VANCOUVER,

LONDON, England

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AGENCIES MAINTAINING A STOCK OF JENKINS VALVES  
ARE LOCATED IN ALL PRINCIPAL COUNTRIES

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80 WHITE STREET	- - - - -	NEW YORK, N. Y.
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524 ATLANTIC AVENUE	- - - - -	BOSTON, MASS.
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822 WASHINGTON BOULEVARD	- - - - -	CHICAGO, ILL.

FACTORIES—Valve Division and Rubber Division—BRIDGEPORT, CONN.



JENKINS BROS., LIMITED

CATALOGUE No. 10

## GUARANTEE

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We guarantee all JENKINS BROS.' products, when used in the service for which we recommend them, to the extent of replacing any product which proves defective or refunding its purchase price. We will not be responsible for any claims for labour or consequential damages in any case.



# JENKINS BROS., LIMITED

## CATALOGUE No. 10



**T**HIS is a complete catalogue of the products manufactured by Jenkins Bros., Limited. It contains essential information about types, patterns, sizes, list prices, weights and dimensions of Jenkins Bronze, Iron and Steel Valves, and Mechanical Rubber Goods. There is also a section in which various engineering data are listed in a handy and easily accessible form.

Jenkins Valves are regularly made of bronze, iron or steel, in standard, medium and extra heavy patterns. The design, materials and construction of each valve are governed by a thorough knowledge of valves and valve requirements which dates back to 1868, the year Nathaniel Jenkins invented the Jenkins Valve with the renewable disc feature.

*Jenkins Valves are made only by Jenkins Bros., Limited. To protect the user against imitations, each Jenkins Valve has the Jenkins "Diamond" and Signature cast on the body. It is important to insist on this symbol, for valves so marked are guaranteed by Jenkins Bros., Limited.*

*To insure having genuine Jenkins Valves supplied or installed, when Jenkins Valves are specified, all orders and specifications should include the correct figure numbers as shown in this catalogue.*

### ENGINEERING ADVISORY SERVICE

Although the valves listed in this catalogue will fulfil all usual requirements, it is recognized that frequently conditions arise which require valves of special design. Jenkins Bros., Limited, maintains an Engineering Advisory Service to co-operate with engineers, architects, waterworks officials, apparatus manufacturers and prospective users, and assist them in solving such valve problems. This group of engineers, with wide experience in valve design and application, invites you to consult with them.

**Jenkins Bros., Limited**



# JENKINS BROS., LIMITED

## CATALOGUE No. 10

### TRADE CUSTOMS, AGREEMENTS AND TERMS DOMESTIC TRADE ONLY

1. This catalogue supersedes all previous issues. The discounts quoted in the regular discount sheet published by us, apply to the lists printed in this catalogue.
2. Prices are subject to change without notice.
3. Terms are 2% 15th month following date of invoice, net 30th month following date of invoice.
4. Subject to sales tax at rate prevailing at time of shipment, if applicable.
5. We assume no obligation to make shipment by any definite date. All quotations, contracts and sales necessarily are made without liability on our part for delays arising from strikes, accidents, embargoes and other causes beyond our control.
6. Promise of delivery is made in accordance with our judgment and belief, yet such promises merely are indicative of what we hope to accomplish.
7. Before proceeding with the manufacture of special goods and repair work, we will quote prices and await their acceptance unless it is distinctly specified to proceed.
8. Orders for special goods to be manufactured, once accepted by us, cannot be cancelled nor goods returned for credit.
9. Permission must be obtained from us before any goods can be returned for credit. We cannot consider accepting for credit, the return of goods unless such requests include the date of the original purchase and the order number on which the material was ordered. A charge of ten per cent will be made to cover cost of handling. Transportation charges must be prepaid.
10. Orders should be specific and state quantity, sizes and figure numbers of valves (as shown in this catalogue). If in doubt, give a description of the service for which the valve is intended.
11. Specifications for Jenkins Valves should include the correct figure numbers, as shown in this catalogue. Specifications so worded insure the user against imitation valves being supplied.



## SHIPMENTS ABROAD

This catalogue supersedes all previous issues. The discounts quoted in the regular discount sheet published by us, apply to the lists printed in this catalogue.

Prices are subject to change without notice.

We deliver free on board steamer any Canadian or U.S.A. North Atlantic Port.

*Packing.* Cases and crates of ample strength to resist the ocean voyage and handling at ports are always used. Extreme care is exercised in packing.

*Insurance.* When we are asked to effect shipment, we arrange Marine Insurance unless instructed to the contrary, and charge customer with cost.

*Routing Instructions.* Unless specific instructions are given, our Export Department will arrange to forward via most economical route.

*How to Order.* State quantity, size and figure numbers of valves (as shown in this catalogue) or give a description of the service for which the valves are intended.

*Jenkins Valves.* Bronze—Iron—or Steel are stocked with threads or flanges according to British or American standards.

Threads and flanges to other specifications can be supplied promptly.

Comparative tables of threads and flanges are shown on pages 246, 247 and 258.

Weights of individual valves are shown on the same page as that on which the valve is listed in the catalogue.

For countries using the metric system, useful conversion tables are shown on pages 256 and 270.

Jenkins Valves are stocked by our representatives in most countries. Should you have any difficulty in procuring our products we shall be glad to inform you of the nearest place where Jenkins Valves may be obtained.

For the convenience of our customers abroad who should have occasion to cable us, we have listed on pages 226 to 236 our private code pertaining to our products.



# MANUFACTURING FACILITIES



HEAD OFFICE & FACTORY, MONTREAL

## Jenkins Valves—Since 1864

MANUFACTURING operations were commenced at the St. Remi Street, Montreal, Factory in 1906.

The business has grown steadily and in 1931 the foundries were transferred to Lachine, Que., where new buildings had been erected.

The Montreal and Lachine plants are given over exclusively to the manufacture of JENKINS BRONZE, IRON and STEEL Valves.

Jenkins Valves represent over 70 years of progressive Valve Manufacture. They are made to the highest standards of excellence; only the highest quality Metals are used and throughout each process of manufacture every precaution is taken to produce only perfect valves.

### Jenkins Bronze Valve Body Metal

This is a high grade bronze made from accurately proportioned virgin metals. It is regularly used in Jenkins Bronze Valves. Years of service have shown it to have longer life than any other bronze metal for all general purposes. Its average tensile strength is 35,000 lbs. to 40,000 lbs. per square inch.

### Jenkins Bronze Spindle Metal

Valve stems receive a great amount of abuse. A very high grade of manganese bronze is used to offset this abuse, also the torsional and thrust stresses to which valve spindles are subjected. The tensile strength of this metal is 50,000 to 60,000 lbs. per square inch and when necessary a still higher strength metal can be supplied.

### Jenkins Cast Iron

A higher grade of gray iron produced under regular chemical and physical control. It is of uniformly close grain and of great strength and possesses an average tensile strength of 40,000 lbs. per square inch. It is regularly used in all Jenkins Iron Body and All Iron Valves.

### Jenkins Cast Steel (Carbon)

Regularly used in Jenkins Cast Steel Valves, this metal is annealed to relieve internal stresses and to refine the grain. It is suitable for temperatures up to 750° F.

Minimum Tensile Strength.....	70,000 lbs. per sq. in.
Yield Point.....	36,000 lbs. per sq. in.
Elongation in 2".....	22 per cent
Reduction of Area.....	30 per cent

### Jenkins Cast Steel

For service where metal of corrosion resistant properties is required, JENKINS VALVES can be supplied in Stainless Steel for specified pressures and temperatures.

### Special Metals

(For interior parts)

Frequently for corrosion resistance and high temperatures, it is necessary to make valve seats and spindles of an alloy that has greater resistance than the other parts of the valves. In such cases either **WEARESIST** Metal, Monel Metal or an Alloy Steel is employed. All of these are hard tough metals with a tensile strength considerably above 50,000 lbs. per square inch.

### Special Valve Metals

When conditions require it, many of Jenkins Valves can be made of aluminum, **WEARESIST** monel, stainless steel, hard bronze, acid-resisting bronze or other special alloys.

All inquiries will receive immediate attention.



FOUNDRY DIVISIONS, LACHINE



# MANUFACTURING FACILITIES

JENKINS BROS. LIMITED established, in 1921, a metallurgical and chemical laboratory for the purpose of ensuring the provision and use of high quality materials, for controlling by suitable tests the conversion of these materials into a quality product and for keeping abreast of the developments and improvements in the science of metals.

In this department regular physical testing and chemical analyses maintain thorough metallurgical control of the operations of the bronze and iron foundries. Test bars are cast from every heat of cast iron melted and are afterwards tested for tensile strength and transverse bending strength. The alloys from the bronze foundry are regularly tested for tensile strength and hardness and the chemical composition checked by frequent analyses.

Metallography, the science of the internal structure of metals and alloys, is not neglected, for it is only by a combination of chemical, physical and metallographic researches that the metallurgist can obtain a satisfactory conception of the nature of the materials with which he has to deal.

The investigation of the effect of various acids, solutions and organic liquids on valve materials forms an important branch of the work of this department.



CHEMICAL LABORATORY



# MANUFACTURING FACILITIES



SECTION OF BRONZE FOUNDRY DIVISION



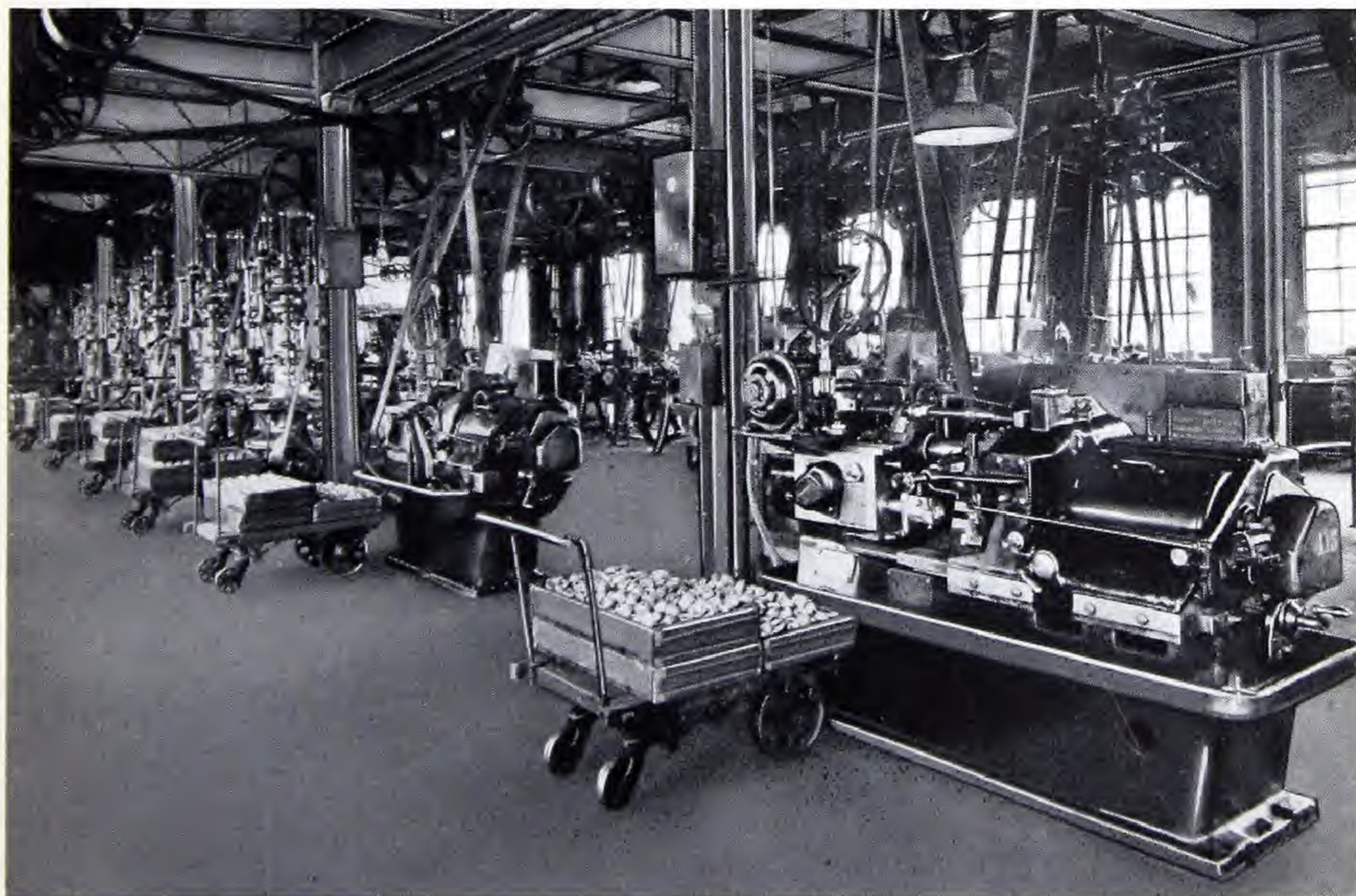
SECTION OF IRON FOUNDRY DIVISION



# MANUFACTURING FACILITIES



BRONZE VALVE DIVISION—SCREW MACHINE DEPARTMENT



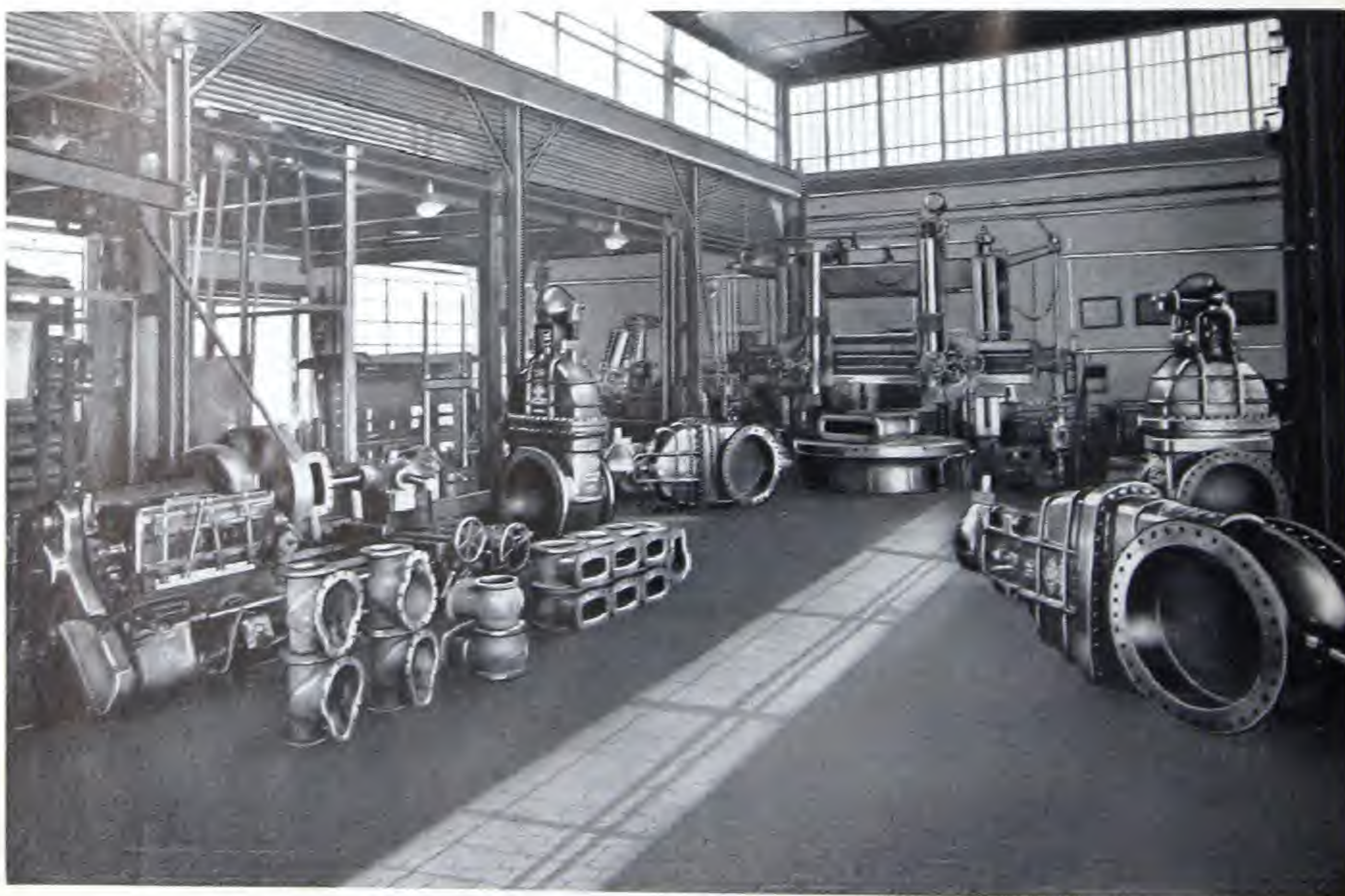
BRONZE VALVE DIVISION—AUTOMATIC MACHINE DEPARTMENT



# MANUFACTURING FACILITIES



IRON VALVE DIVISION—MACHINE DEPARTMENT



IRON VALVE DIVISION—SECTION OF MACHINE DEPARTMENT



JENKINS  
BRONZE VALVES

*fitted with the*  
Jenkins Renewable Disc

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Pages 15 to 65 inclusive



## DESIGN OF JENKINS VALVES fitted with the JENKINS RENEWABLE DISC

Described on Pages 15 to 65

THE Jenkins Valves with the renewable disc feature, which are listed in this section, are improvements and additions to the distinct type of valve invented by Nathaniel Jenkins in 1868, in which was incorporated a Jenkins composition rubber disc. This group includes types and patterns for a wide range of applications under varying conditions and working pressures.

Among the different patterns listed are globe, angle, cross, check, Y or blow-off, quick-opening, whistle, rapid action, radiator, air gun, combination stop and check, foot check and other types, all having the advantages of the Jenkins Renewable Disc.

Jenkins Discs are made of several rubber compositions, each exactly suited to specific service conditions. They are of proper resiliency to readily conform to the seat, assuring absolute tightness. Discs of various metal compositions also are made for services where rubber discs are not recommended. They are exactly the same size as the rubber discs.

The disc with which each group of valves is regularly fitted, and the discs for optional services, are explained on their respective pages. Discs for other services than those listed, are explained in a comprehensive chart on pages 212 and 213. For special services or where unusual conditions are involved, our Engineering Advisory Service should be consulted.

*The disc is contained in a disc holder and can be renewed easily and quickly at slight expense, without removing the valve from the line. In each case, the thickness of the disc equals the full*

depth of the disc holder, giving entire rim protection to the seat face of the disc.

The bodies of all Jenkins Valves are liberally proportioned, uniform in thickness and have free passages. Tapped ends have full length pipe threads.

*Ample clearance is allowed between the last pipe thread and the diaphragm to prevent end of pipe from striking the diaphragm and distorting the seat.*

Spindles are made of manganese bronze and accurately machined and threaded. The valves are so designed that when fully open the operating threads of both spindle and bonnet are not in communication with the fluid passing through the valve, as a back-seating arrangement is applied to the bottom of the bonnet. This protects the threads against foreign deposits or accumulations, which are generally of an abrasive nature, causing excessive wear. It also permits the valve to be *repacked under full pressure when in the open position.*

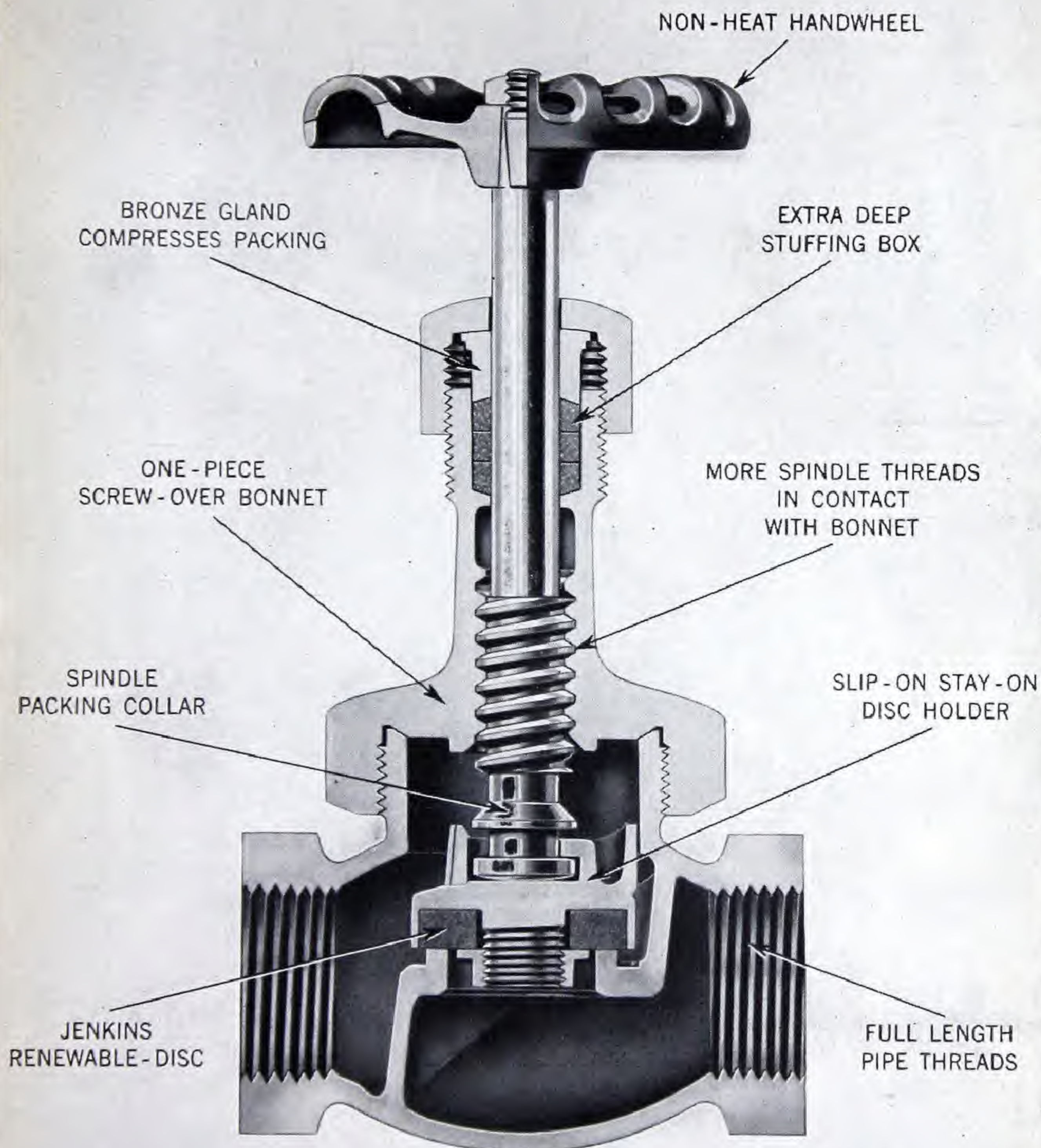
All Jenkins Bronze Valves arranged with stuffing box have a bronze gland which compresses the asbestos ring packing with which the stuffing box is packed and prevents leakage around the spindle, even though the packing nut is *screwed down only hand-tight.* This provides for easy operation of the valve since the packing cannot cause excessive friction on the spindle. *The packing chamber in every case is exceptionally deep and holds an extra large amount of packing.*

Jenkins Bronze Valves are made from formulae that produce the highest quality Valve Bronze. Modern foundry equipment and practice under technical control assure uniformity of castings.



FIG. 106-A

STANDARD BRONZE GLOBE VALVE



ADDITIONAL INFORMATION LISTED ON FOLLOWING PAGES



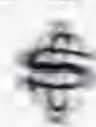
# JENKINS BRONZE VALVES

## GLOBE, ANGLE CROSS (Patented) Standard Pattern—New Style

One-Piece Screw-Over Bonnet

Slip-On, Stay-On Disc Holder

Regularly Fitted with No. 119 Disc for 150 Pounds Steam Working Pressure  
For 250 Pounds Oil, Water, Gas Working Pressure use No. 936 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0280-129456 and 0292-129456

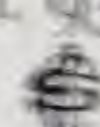


Fig. 106-A  
Globe, Screwed  
Code: ABTUG



Fig. 107-A  
Angle, Screwed  
Code: ABTUG



Fig. 108-A  
Cross, Screwed  
Code: ABTUG

Sizes	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 106-A	1.00	1.00	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
Wgt., lbs. and oz.	0-7	0-14	1-2	1-10	2-7	3-0	5-2	7-7	12-5	18-8	28-6
Fig. 107-A	1.00	1.00	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
Wgt., lbs. and oz.	0-6	0-14	1-2	1-9	2-5	3-5	4-14	7-1	11-12	18-3	26-11
Fig. 108-A		2.25	2.65	2.95	3.30	4.25	6.25	8.20	12.50	26.25	36.00
Wgt., lbs. and oz.		0-14	1-4	1-12	2-10	3-12	5-7	7-10	13-6	20-11	29-11
Fig. 107-A		3.50	4.00	4.00	5.00	6.00	9.00	11.00	16.50	25.00	34.00
Wgt., lbs. and oz.		1-11	2-0	3-6	4-14	6-9	9-0	11-15	19-2	29-3	40-11
Fig. 108-A		3.50	4.00	4.00	5.00	6.00	9.00	11.00	16.50	25.00	34.00
Wgt., lbs. and oz.		1-11	2-0	3-5	4-12	6-5	8-12	11-9	18-9	28-14	39-0
Fig. 107-A				9.25	10.50	12.00	15.75	19.75	30.25	43.50	57.75
Wgt., lbs. and oz.				4-4	6-2	7-15	10-14	13-13	22-10	35-3	46-12



Fig. 107-A  
Globe, Flanged  
Code: ABTUD



Fig. 108-A  
Angle, Flanged  
Code: ABTUD



Fig. 109-A  
Cross, Flanged  
Code: ABTUD



JENKINS BRONZE VALVES

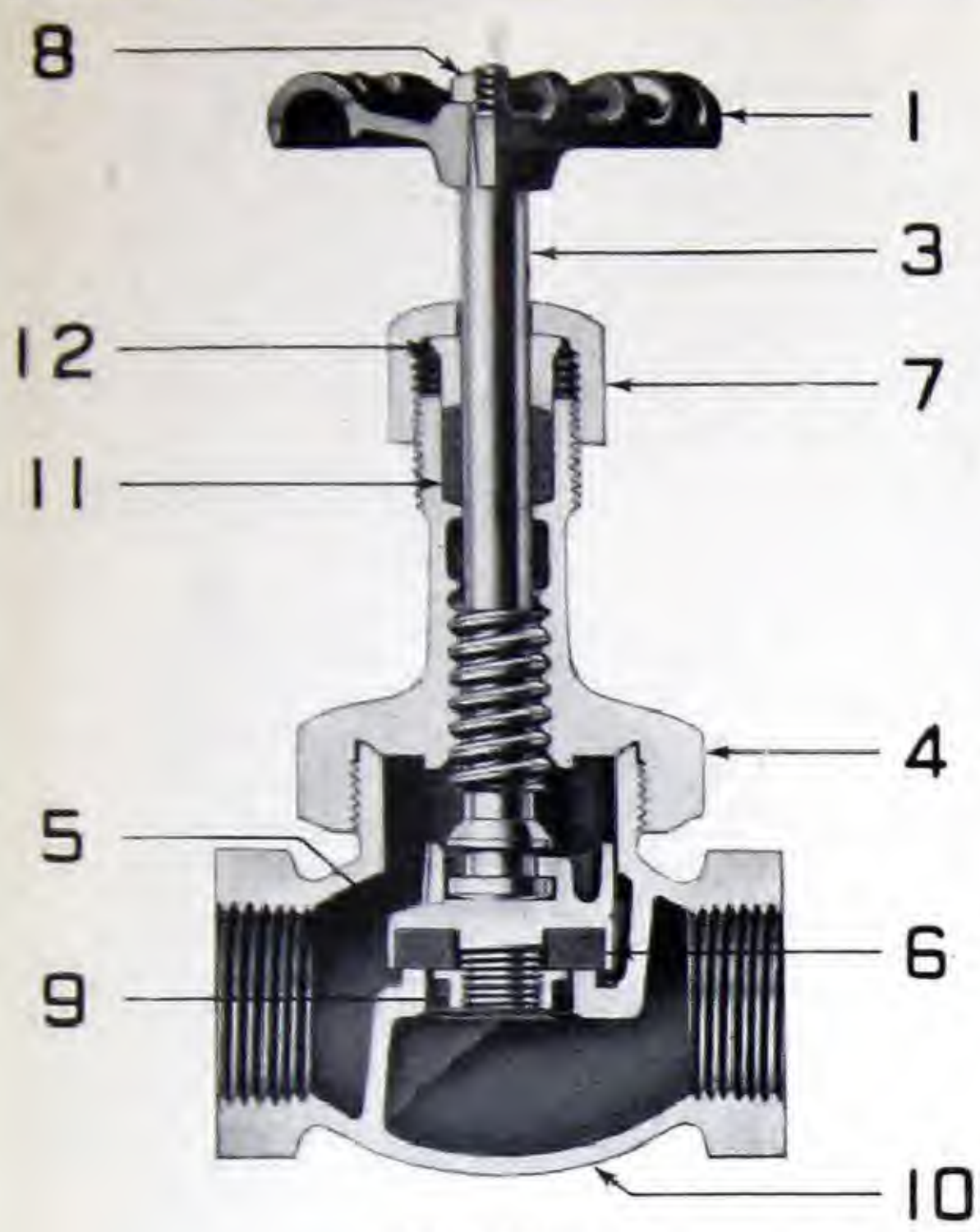


Fig. 106-A  
Sectional View

GLOBE, ANGLE, CROSS  
Standard Pattern  
New Style

With One-Piece Screw-Over Bonnet

A bonnet of exceptional strength. The solid one-piece construction permits ease in taking off and replacing the bonnet over and over again without danger of distorting or springing it.

Slip-On, Stay-On Disc Holder

This is an exclusive Jenkins advantage. Open the spindle merely a turn or so, and you can take off the bonnet without the disc holder falling off the spindle.

The trimmings of the globe valves are interchangeable, part for part, size for size, with those of the angle and cross patterns.

Disc nuts, part No. 9, sizes 3/4" to 2" are made for use with square hole discs. 1/4", 3/8", 1/2", 2 1/2" and 3" valves have disc nuts for use with round hole discs.

In 1/8" valves the disc is spun into the holder.

List Prices of Parts

Part No.	Sizes	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel		.10	.10	.10	.15	.20	.20	.25	.30	.35	.55	.65
3. Spindle		.15	.15	.18	.25	.35	.40	.60	.75	.90	2.00	3.20
4. Bonnet		.30	.35	.35	.40	.55	.65	.95	1.35	2.10	4.30	6.30
5. Disc Holder		.12	.18	.18	.21	.30	.35	.47	.80	1.40	2.20	2.70
7. Packing Nut		.15	.15	.15	.20	.20	.25	.35	.40	.50	.85	.85
8. Wheel Nut		.05	.05	.05	.05	.05	.08	.10	.10	.20	.25	.35
9. Disc Nut			.05	.05	.05	.05	.08	.10	.15	.20	.20	.20
11. Packing		.05	.05	.05	.05	.05	.06	.06	.06	.06	.10	.10
12. Gland		.15	.15	.15	.18	.20	.25	.30	.50	.55	1.20	1.25
Disc Plate (not illustrated)											.35	.50
TC. Trimming, complete		.75	.85	.95	1.10	1.50	1.90	2.70	3.70	5.85	10.50	14.70
DHC. Disc Holder, complete		.25	.25	.30	.35	.45	.55	.70	1.15	1.90	3.10	4.15

For list price of Disc, part 6, see page 212.

Dimensions, Inches

Sizes	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Globe, face to face, screwed	1 9/16	2 1/8	2 3/8	2 5/8	3 3/16	3 3/4	4 1/4	4 3/4	5 3/4	6 5/8	8
Globe, face to face, flanged		3 3/8	3 3/8	4	4 3/4	5 3/8	5 7/8	6 1/2	7 1/2	8 1/2	9 7/8
Angle or Cross, centre to face, screwed	2 5/32	1 1/16	1 3/16	1 1/4	1 1/2	1 3/4	2	2 1/4	2 3/4	3 1/4	3 3/4
Angle or Cross, centre to face, flanged		2	2	2 3/8	2 7/8	3	3 1/4	3 3/4	4 1/4	4 3/4	5 1/8
Diameter of flanges		2 1/2	2 1/2	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges		9/32	9/32	5/16	11/32	3/8	13/32	7/16	1/2	9/16	5/8
Globe, centre to top of hand wheel, open	3	4 3/16	4 9/16	5 3/16	5 3/4	6 5/8	7 9/16	8 3/8	9 3/8	10 13/16	11 13/16
Angle, centre to top of hand wheel, open	3	4 1/8	4 1/2	5 1/8	5 11/16	6 1/2	7 7/16	8 1/4	9 1/4	10 11/16	11 1/2
Diameter of hand wheel	1 1/2	2 1/16	2 1/16	2 7/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5	5 15/16



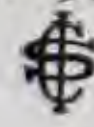
# JENKINS BRONZE VALVES

## GLOBE, ANGLE, CROSS Standard Pattern—Old Style

Regularly Fitted with No. 119 Disc for 150 Pounds Steam Working Pressure  
For 250 Pounds Oil, Water, Gas Working Pressure use No. 936 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0189-123456 and 0190-123456



**Fig. 106**  
Globe, Screwed  
Code: ABTSY



**Fig. 108**  
Angle, Screwed  
Code: ABTUF



**Fig. 110**  
Cross, Screwed  
Code: ABTUK

Sizes.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 106 .....	1.10	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
Wgt., lbs. and oz. . .	0-5	0-13	1-0	1-9	2-6	3-5	4-13	6-14	10-8	16-10	26-1
Fig. 108 .....	1.10	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
Wgt., lbs. and oz. . .	0-5	0-12	0-15	1-8	2-4	3-1	4-10	6-9	11-1	15-8	25-8
Fig. 110 .....	.....	2.25	2.65	2.95	3.30	4.25	6.25	8.20	12.50	26.25	36.00
Wgt., lbs. and oz. . .	.....	0-13	1-0	1-11	2-6	3-5	4-13	6-14	11-14	17-3	26-14
Fig. 107 .....	.....	3.50	4.00	4.00	5.00	6.00	9.00	11.00	16.50	25.00	34.00
Wgt., lbs. and oz. . .	.....	1-10	1-14	3-5	4-10	6-8	9-0	11-6	18-9	27-13	37-15
Fig. 109 .....	.....	3.50	4.00	4.00	5.00	6.00	9.00	11.00	16.50	25.00	34.00
Wgt., lbs. and oz. . .	.....	1-11	2-0	3-9	5-1	6-12	8-12	11-2	19-2	27-8	37-9
Fig. 111 .....	.....	.....	.....	9.25	10.50	12.00	15.75	19.75	30.25	43.50	57.75
Wgt., lbs. and oz. . .	.....	.....	.....	3-12	5-8	8-0	11-0	14-0	24-0	36-0	46-6



**Fig. 107**  
Globe, Flanged  
Code: ABTUC



**Fig. 109**  
Angle, Flanged  
Code: ABTUH



**Fig. 111**  
Cross, Flanged  
Code: ABTUM



JENKINS BRONZE VALVES

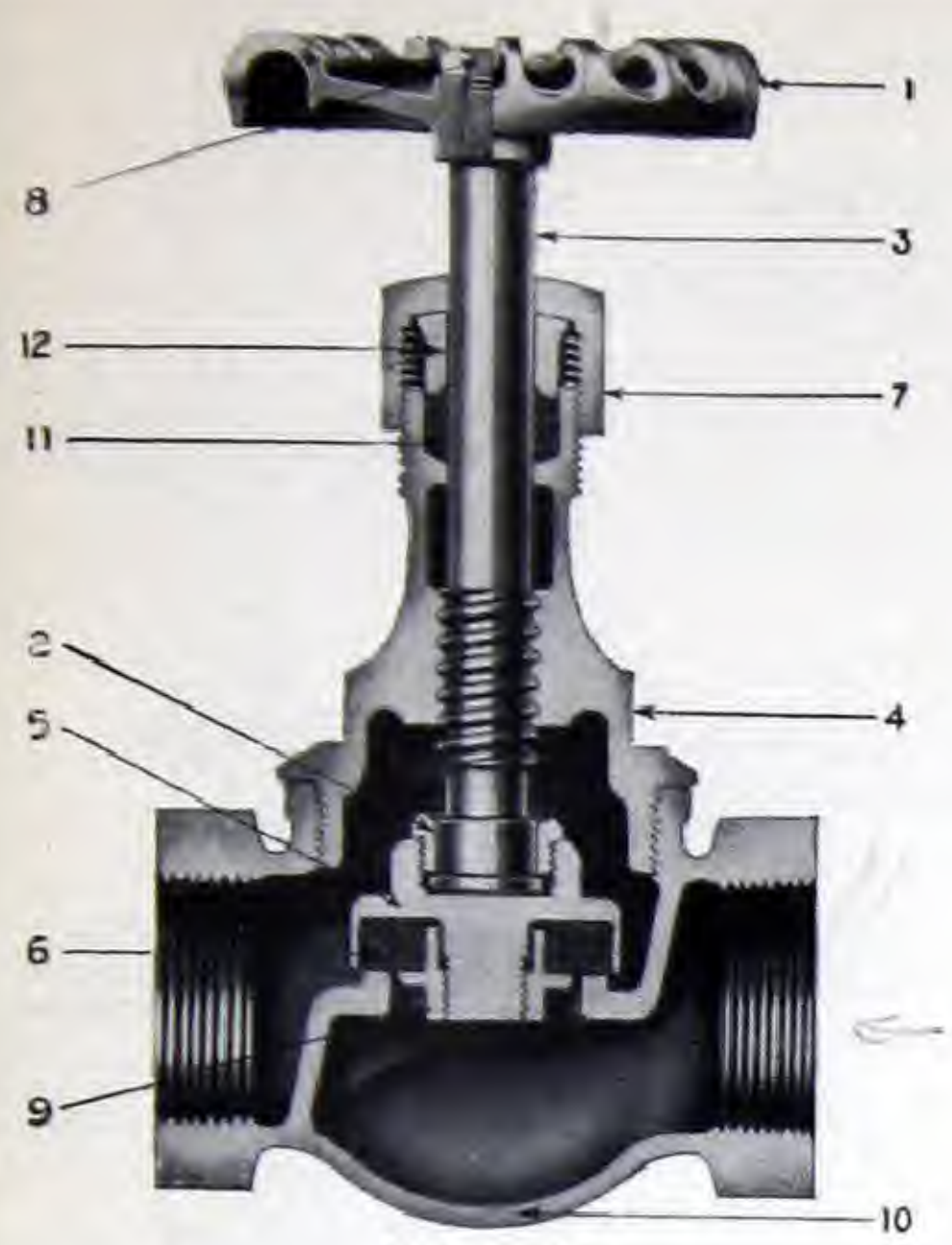


Fig. 106  
Sectional View

GLOBE, ANGLE, CROSS  
Standard Pattern—Old Style  
Description of Parts

In 1/8-inch valves the disc is spun into the holder which is integral with the spindle; all other sizes have renewable discs.

Disc Nuts, part No. 9, sizes 3/4" to 2" are made for use with square hole discs. 1/4", 3/8", 1/2", 2 1/2" and 3" valves have disc nuts for use with round hole discs.

\*Angle and cross valves require longer spindles and bonnets than globe valves, and when ordering these parts they should be designated as Parts 3a or 4a. No difference in price.

List Prices of Parts

Sizes.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel.....	.10	.10	.10	.15	.20	.20	.25	.30	.35	.55	.65
2. Lock nut.....		.06	.06	.06	.10	.10	.12	.15	.25	.40	.50
3. Spindle, globe.....	.25	.15	.18	.25	.35	.40	.60	.75	.90	2.00	3.20
*3a. Spindle, angle or cross	.25	.15	.18	.25	.35	.40	.60	.75	.90	2.00	3.20
4. Bonnet, globe.....	.30	.35	.35	.40	.55	.65	.95	1.35	2.10	4.30	6.30
*4a. Bonnet, angle or cross	.30	.35	.35	.40	.55	.65	.95	1.35	2.10	4.30	6.30
5. Disc holder.....		.12	.12	.15	.20	.25	.35	.65	1.15	1.80	2.20
7. Packing nut.....	.15	.15	.15	.20	.20	.25	.35	.40	.50	.85	.85
8. Wheel nut.....	.05	.05	.05	.05	.05	.08	.10	.10	.20	.25	.35
9. Disc nut.....		.05	.05	.05	.05	.08	.10	.15	.20	.20	.20
11. Packing.....	.05	.05	.05	.05	.05	.06	.06	.06	.06	.10	.10
12. Gland.....	.15	.15	.15	.18	.20	.25	.30	.50	.55	1.20	1.25
15. Disc plate.....										.35	.50
TC. Trimming, complete..	.75	.85	.95	1.10	1.50	1.90	2.70	3.70	5.85	10.50	14.70
DHC Disc holder, complete		.25	.30	.35	.45	.55	.70	1.15	1.90	3.10	4.15

For list price of Disc, part 6, see page 212.

Dimensions, Inches

Sizes.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Globe, face to face, screwed..	1 9/16	2 1/8	2 3/8	2 3/4	3 5/16	3 13/16	4 1/4	4 7/8	5 3/4	6 5/8	8 1/2
Globe, face to face, flanged..		2 1/2	3	3 1/16	3 5/8	4	4 3/8	4 7/8	6	6 3/4	7 1/2
Angle or cross, centre to face, screwed.....	25/32	1 1/16	1 3/16	1 3/8	1 1/2	1 3/4	2 1/16	2 1/4	2 7/8	3 1/4	4 1/4
Angle or cross, centre to face, flanged.....		1 15/16	2 1/16	2 1/16	2 3/8	2 5/8	2 15/16	3 3/16	3 3/4	4 1/4	4 9/16
Diameter of flanges.....		2 1/2	2 1/2	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges.....		9/32	9/32	5/16	11/32	3/8	13/32	7/16	1/2	9/16	5/8
Globe, centre to top of hand wheel, open, screwed.....	3	4 1/4	4 5/16	5 1/2	6	6 9/16	7 1/2	8 3/8	9 7/16	10 13/16	11 13/16
Globe, centre to top of hand wheel, open, flanged.....		4 1/4	4 9/16	5 13/16	6 3/8	7 1/16	8 3/8	8 13/16	10 1/8	11 3/4	13 1/16
Angle, centre to top of hand wheel, open.....	3	4 1/16	4 1/4	5 3/8	5 7/8	6 1/2	7 11/16	8 1/8	9 3/16	10 9/16	11 15/16
Diameter of hand wheel.....	1 1/2	2 1/16	2 1/16	2 7/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5	5 15/16



# JENKINS BRONZE VALVES

## STREAMLINE, GLOBE AND ANGLE for Streamline Copper Pipe

Manufactured under Licence by Canada Wire and Cable Company.

Regularly Fitted with No. 119 Disc for 150 Pounds Steam Working Pressure  
For 250 Pounds Oil, Water, Gas Working Pressure use No. 936 Disc



Fig. 106A-S  
Globe  
Code: ABTUBS

These valves are exactly the same pattern as Jenkins Standard Bronze Globe and Angle Valves excepting that the pipe ends are for use on Streamline Copper pipe and fittings.

When the solder is fed through the hole, the law of capillary attraction distributes it over the entire surface between the valve and pipe. When the solder appears around the end of the valve, all that is necessary is to put a drop of solder in the hole, making a perfect, leak-proof, vibration-proof joint.



Fig. 108A-S  
Angle  
Code: ABTUGS

Sizes .....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 106A-S.....	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
Weight, lbs. and oz.....	0-14	1-2	1-10	2-6	3-8	5-0	7-3	12-0	18-0	27-10
Fig. 108A-S.....	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
Weight, lbs. and oz.....	0-14	1-2	1-9	2-4	3-4	4-12	6-12	11-7	17-14	26-3

### Dimensions, Inches

Sizes .....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
End to end, globe.....	$2\frac{3}{4}$	$3\frac{1}{8}$	$3\frac{1}{2}$	$4\frac{1}{4}$	$4\frac{3}{4}$	$5\frac{1}{4}$	$5\frac{7}{8}$	7	$8\frac{3}{8}$	$9\frac{7}{8}$
Centre to end, angle.....	$1\frac{3}{8}$	$1\frac{9}{16}$	$1\frac{3}{4}$	$2\frac{1}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	$2\frac{15}{16}$	$3\frac{1}{2}$	$4\frac{3}{16}$	$4\frac{15}{16}$
Depth of port.....	$\frac{9}{16}$	$1\frac{1}{16}$	$1\frac{3}{16}$	1	$1\frac{1}{16}$	$1\frac{1}{8}$	$1\frac{3}{16}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$
Globe, centre to top of hand wheel, open.....	$4\frac{3}{16}$	$4\frac{9}{16}$	$5\frac{3}{16}$	$5\frac{3}{4}$	$6\frac{5}{8}$	$7\frac{3}{16}$	$8\frac{3}{8}$	$9\frac{3}{8}$	$10\frac{13}{16}$	$11\frac{13}{16}$
Angle, centre to top of hand wheel, open.....	$4\frac{1}{8}$	$4\frac{1}{2}$	$5\frac{1}{8}$	$5\frac{11}{16}$	$6\frac{1}{2}$	$7\frac{7}{16}$	$8\frac{1}{4}$	$9\frac{1}{4}$	$10\frac{11}{16}$	$11\frac{1}{2}$
Diameter of hand wheel.....	$2\frac{1}{16}$	$2\frac{1}{16}$	$2\frac{7}{16}$	$2\frac{13}{16}$	3	$3\frac{7}{16}$	$4\frac{1}{8}$	$4\frac{3}{8}$	5	$5\frac{15}{16}$

List price of Parts same as Fig. 106-A listed on page 17.



JENKINS BRONZE VALVES

GLOBE AND ANGLE  
Standard Pattern—Bronze Wheel

Regularly Fitted with No. 119 Disc for  
150 Pounds Steam Working Pressure

For 250 Pounds Oil, Water, Gas Working  
Pressure use No. 936 Disc

Made from the same patterns as Figs. 106 and 108, and usually fitted with Bronze wheel, Fig. 571 on page 116, and in various styles of finish. Fitted with Jenkins Disc either hard, medium or soft composition as ordered. These valves are well adapted for use on fine plumbing, heating and open work or exhibition installations and special apparatus. These valves also can be made from the New Style, Figs. 106-A and 108-A patterns shown on pages 16 and 17. When desired, these valves can also be supplied with Bronze wheel, Fig. 185 or composition wheel Fig. 572. **Prices on application**



Fig. 310  
Globe, Screwed  
Code: ABUYI



Fig. 311  
Angle, Screwed  
Code: ABUYK

Finish No.....Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Rough body, finished trimmings.....	1.80	2.15	2.30	3.15	3.95	5.30	7.30	11.95	20.00	26.50
2. Finished all over.....	2.30	2.55	2.80	3.65	4.50	6.05	8.30	13.20	22.50	30.00
3. Rough body, nickel-plated trimmings.....	2.10	2.45	2.60	3.45	4.25	5.60	7.60	12.25	20.50	27.50
4. Rough body, nickel-plated all over.....	2.20	2.55	2.70	3.55	4.35	5.70	7.70	12.35	21.00	28.00
5. Finished and nickel-plated all over.....	2.70	3.00	3.20	4.05	4.90	6.45	8.70	13.60	23.00	31.00

Weights and Dimensions same as Figs. 106 and 108 listed on pages 18 and 19.



Fig. 314  
Globe, with Union  
Code: ABUYR

With Male Union

Regularly Fitted with No. 119 Disc for  
Low Pressure Steam Service

These valves are the same as above but are fitted with male union. Female union can be furnished if so specified when ordered.



Fig. 315  
Angle, with Union  
Code: ABUYT

Finish No.....Sizes	3/8	1/2	3/4	1	1 1/4	1 1/2	2
6. Rough body, finished trimmings.....	2.90	3.05	4.15	5.05	6.65	8.80	14.10
7. Finished all over.....	3.30	3.50	4.65	5.60	7.40	9.80	15.30
8. Rough body, nickel-plated trimmings...	3.20	3.35	4.45	5.35	6.95	9.10	14.35
9. Rough body, nickel-plated all over.....	3.30	3.45	4.55	5.45	7.05	9.20	14.45
10. Finished and nickel-plated all over.....	3.75	3.90	5.05	6.00	7.55	10.20	15.70

Weights and Dimensions approximately same as Figs. 167 and 168 listed on page 30.



# JENKINS BRONZE VALVES

## HOSE GLOBE AND ANGLE Threaded on Outlet for Hose Connection

Regularly Fitted with No. 946 Disc for 250 Pounds Working Water Pressure

These valves are fitted with Jenkins Discs of resilient rubber composition specially adapted for cold water service, ensuring tightness under pressure, and freedom from corrosion, or sticking at the seat.

Unless otherwise ordered hose threads will be supplied as follows:  $\frac{1}{2}$ " and  $\frac{3}{4}$ " garden hose standard, 1" to 2" inclusive, to iron pipe standard. On 2 $\frac{1}{2}$ " and 3" it will be necessary for customers to specify diameter and number of threads per inch, or preferably send sample hose coupling.

Iron pipe thread can also be supplied on  $\frac{1}{2}$ " and  $\frac{3}{4}$ " when desired.



Fig. 113  
Globe  
Code: ABTUV



Fig. 112  
Angle  
Code: ABTUS

### Screwed Inlet, without Cap and Chain

Finish No. .... Sizes	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3
11. Rough body, finished trimming*	2.10	2.70	3.30	4.70	6.50	9.90	17.10	23.50
12. Rough body, finished trimmings†	2.75	3.35	4.00	5.50	7.50	12.00	20.00	26.50
13. Finished all over†	3.20	3.90	4.60	6.20	8.40	12.50	22.50	30.00
14. Rough body, nickel-plated all over†	3.20	3.80	4.40	5.90	7.90	12.40	20.60	27.10
15. Finished and nickel-plated all over†	3.60	4.20	5.00	6.60	8.80	13.00	23.00	31.00

\* Iron Wheel.

† Bronze Wheel.

### Dimensions, Inches



Fig. 114a  
Globe  
Code: ABTUV

Size of Valve	Number of Hose Threads	Diameter of Hose Threads	Centre to End of Hose Threads, Globe	Centre to Top of Wheel Open, Globe	Diameter of Hand Wheel	Centre to Face Screwed End, Globe	Centre to End of Hose Threads, Angle	Centre to Top of Wheel Open, Angle	Centre to Face Screwed End, Angle
$\frac{1}{2}$ "	11 $\frac{1}{2}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	5 $\frac{1}{2}$	2 $\frac{7}{16}$	1 $\frac{3}{8}$	1 $\frac{1}{16}$	5 $\frac{3}{8}$	1 $\frac{3}{8}$
$\frac{3}{4}$ "	11 $\frac{1}{2}$	1 $\frac{1}{16}$	1 $\frac{7}{8}$	6	2 $\frac{13}{16}$	1 $\frac{21}{32}$	1 $\frac{21}{32}$	5 $\frac{7}{8}$	1 $\frac{1}{2}$
1	11 $\frac{1}{2}$	1 $\frac{1}{16}$	2	6 $\frac{1}{16}$	3	1 $\frac{29}{32}$	1 $\frac{27}{32}$	6 $\frac{1}{2}$	1 $\frac{3}{4}$
1 $\frac{1}{4}$ "	11 $\frac{1}{2}$	1 $\frac{23}{32}$	2 $\frac{3}{16}$	7 $\frac{1}{2}$	3 $\frac{7}{16}$	2 $\frac{1}{8}$	2 $\frac{1}{8}$	7 $\frac{11}{16}$	2 $\frac{1}{16}$
1 $\frac{1}{2}$ "	11 $\frac{1}{2}$	1 $\frac{29}{32}$	2 $\frac{11}{16}$	8 $\frac{3}{8}$	4 $\frac{1}{8}$	2 $\frac{1}{16}$	2 $\frac{7}{16}$	8 $\frac{1}{8}$	2 $\frac{1}{4}$
2	11 $\frac{1}{2}$	2 $\frac{3}{8}$	3 $\frac{5}{32}$	9 $\frac{1}{16}$	4 $\frac{3}{8}$	2 $\frac{7}{8}$	3 $\frac{1}{16}$	9 $\frac{1}{16}$	2 $\frac{7}{8}$
2 $\frac{1}{2}$ "	x	x	3 $\frac{3}{4}$	10 $\frac{13}{16}$	5	3 $\frac{5}{16}$	3 $\frac{5}{8}$	10 $\frac{9}{16}$	3 $\frac{1}{8}$
3	x	x	4 $\frac{1}{2}$	11 $\frac{13}{16}$	5 $\frac{15}{16}$	4 $\frac{1}{4}$	4 $\frac{1}{2}$	11 $\frac{15}{16}$	4 $\frac{1}{4}$

x To Specification of Customer.



Fig. 114  
Angle  
Code: ABTUX

### Screwed Inlet, with Cap and Chain

Finish No. .... Sizes	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3
11. Rough body, finished trimming*	4.50	5.50	7.00	9.50	15.00	22.00	30.00
12. Rough body, finished trimmings†	5.15	6.25	7.80	10.50	16.50	24.80	32.80
13. Finished all over†	5.55	6.65	8.20	10.90	16.90	25.40	33.40
14. Rough body, nickel-plated all over†	6.00	7.00	8.70	11.70	16.80	27.50	36.50
15. Finished and nickel-plated all over†	6.40	7.40	9.00	12.00	17.20	28.00	37.50

\* Iron Wheel.

† Bronze Wheel.



.....

### Standard Pattern—Bolted Bonnet

## Renewable Bronze Seat Ring

Regularly Fitted with No. 119 Disc for 150 Pounds Steam Working Pressure  
For 250 Pounds Oil, Water, Gas Working Pressure use No. 936 Disc



**Fig. 660**  
Globe, Screwed  
Code: ABWIJ

**Fig. 661**  
Globe, Flanged  
Code: ABWIK

Made from our regular iron body bronze mounted patterns as shown on pages 122 and 123.

Regularly supplied with iron hand wheel, steel studs and nuts. Bronze hand wheel and bronze studs and nuts can be supplied if desired. **Prices on Application**



**Fig. 662**  
Angle, Screwed  
Code: ABWIM

**Fig. 663**  
Angle, Flanged  
Code: ABWIO

Sizes.....	3½	4	5	6	8
Fig. 660.....	Prices on application.....				
Wgt., lbs. ....	74	106	155	240	420
Fig. 661.....	Prices on application.....				
Wgt., lbs. ....	95	128	175	260	450
Fig. 662.....	Prices on application.....				
Wgt., lbs. ....	72	98	150	235	410
Fig. 663.....	Prices on application.....				
Wgt., lbs. ....	91	125	175	250	421

### Dimensions, Inches

Sizes.....	3½	4	5	6	8
Globe, face to face, screwed.....	9½/16	11½/16	13¾/16	15⅞/8	18⅝/8
Globe, face to face, flanged.....	9½/16	11⅞/16	13¼/16	15⅞/8	18¾/8
Angle, centre to face, screwed.....	5	6	6⅝/8	8	9¾/8
Angle, centre to face, flanged.....	5¾/8	5⅞/8	6½/2	8	9¼/4
Diameter of flanges.....	8½/2	9	10	11	13½/2
Thickness of flanges.....	1¾/16	1⅝/16	1⅝/16	1	1⅞/8
Globe, centre to top of hand wheel, open.....	13¼/4	15¼/4	17¼/4	18¾/4	22⅞/16
Angle, centre to top of hand wheel, open.....	13⅝/8	14⅞/8	17⅝/8	19	22⅞/16
Diameter of hand wheel.....	8	9	10	12	14



## THROTTLING NUT



**Fig. 344**  
Throttling Nut  
Code: ABVBT



Phantom View of Valve  
with Throttling Nut



View showing assembly  
relation of disc holder,  
disc and Throttling  
Nut.

The Throttling Nut is a device of correct size to effect a neat piston fit within the seat, and is provided with extensions as illustrated, which furnish the proper orifices to restrict the flow of steam or other fluid so that the desired terminal pressure or the quantity of fluid passing through the valve may be controlled easily and accurately.

The trouble frequently experienced where valves are used partly open or "throttled" is avoided because most of the destruction from wire-drawing effect of steam or fluids is reduced by the Throttling Nut and the side of the seat. Consequently the valve disc and face of the seat will last many times longer.

The nut is readily applied to any Jenkins Standard Pattern Bronze Globe, Angle and Cross Valve by removing regular disc nut, part 9, and substituting the Throttling Nut. A valve so fitted is very efficient for steam supply to a pump, heating kettle or similar devices, and where flow of water to a boiler, tank or receptacle is to be regulated, or places where valves are liable to be used throttled or partly open.

Sizes . . . . .	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 344 . . . . .	.50	.50	.55	.60	.70	.80	.90	1.25	3.00	3.45
Wgt., lbs. and ozs. . . . .	0- $\frac{1}{8}$	0- $\frac{1}{8}$	0- $\frac{1}{4}$	0- $\frac{1}{4}$	0-1	0- $1\frac{3}{4}$	0-3	0-5	0-11	1-2



# JENKINS BRONZE VALVES

## RADIATOR

### Regular Pattern, Details of Construction

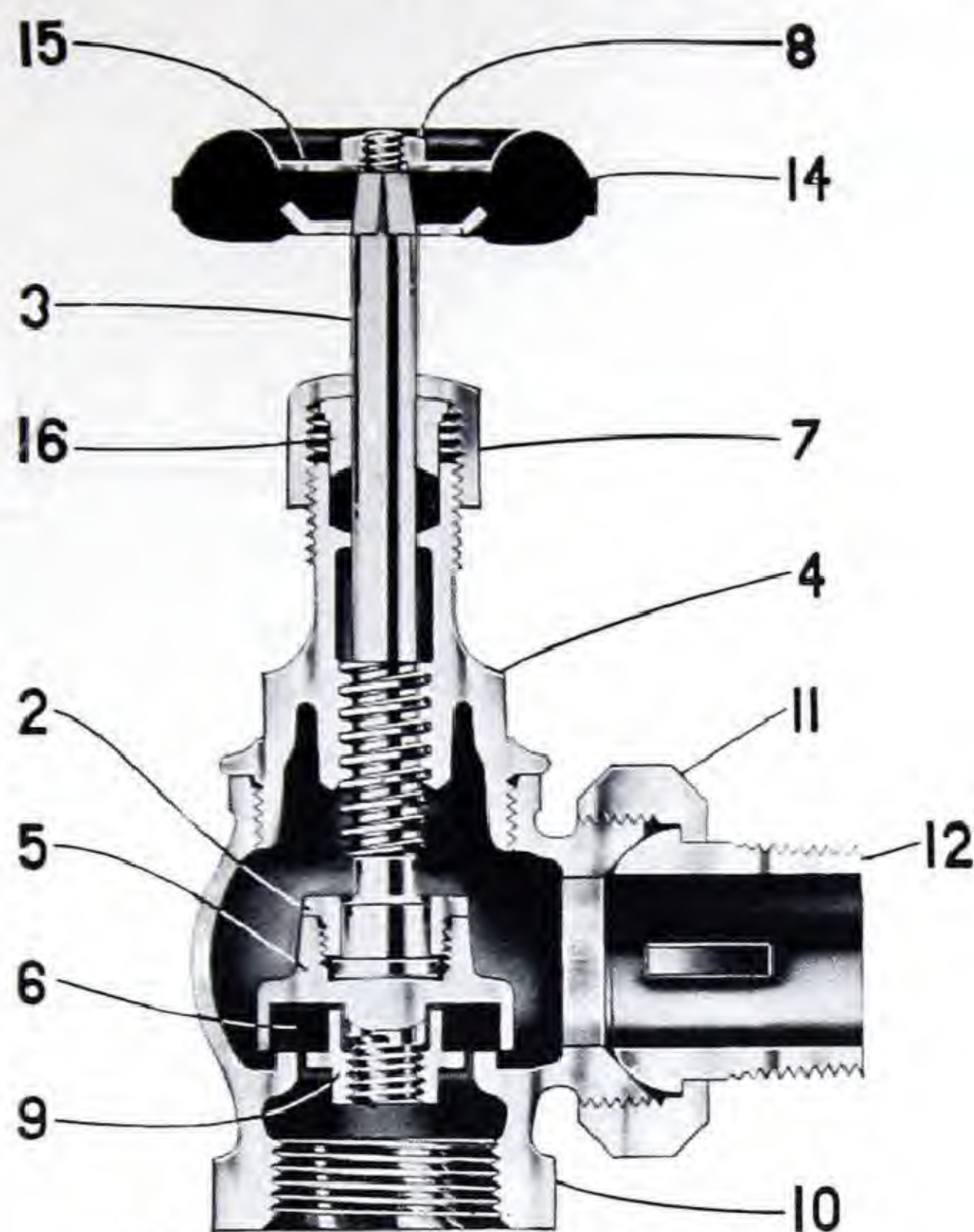


Fig. 491 Angle with Male Union  
Sectional View

- 2. LOCK NUT—holds disc holder to spindle.
- 3. SPINDLE—manganese bronze, deep-threaded.
- 4. BONNET—screws into top of body.
- 5. DISC HOLDER—accommodates disc.
- 6. JENKINS DISC—renewable composition. Insures a tight and leakless seat.
- 7. PACKING NUT—liberal in proportions. Holds gland in position.

- 8. WHEEL NUT.
- 9. DISC NUT—secures disc in holder.
- 10. BODY—well proportioned in every detail.
- 11. UNION NUT—enables easy installation.
- 12. NIPPLE—with deep clean-cut threads.
- 14. WHEEL.
- 15. TOP PLATE.
- 16. GLAND—compresses packing.

More important than any other part of a heating system are the radiator valves behind it. That most heating system troubles may be traced to inferior valves cannot be questioned. To obviate valve trouble and to keep good a good heating system the Valves must have adequate strength and weight to meet the extreme strain they will inevitably be called upon to bear. Jenkins regular Pattern Radiator Valves were originally designed and built for steam service.

### For Hot Water Heating Systems

For this service a small hole is drilled in the diaphragm to permit a slight circulation of water through the radiator at all times to prevent freezing.

Can be supplied in any of the regular pattern valves. Regularly fitted with black fibre composition hand wheels, but can be furnished with lock shield and key.

*In addition to the various finishes of Jenkins Radiator Valves as shown on the next pages, any of these valves can be furnished finished and chromium-plated all over. Prices on application.*



# JENKINS BRONZE VALVES

## RADIATOR, GLOBE AND ANGLE Regular Pattern, With Fibre Composition Wheel Fitted with No. 119 Disc for Steam Service



**Fig. 490**  
Angle, Screwed  
Code: ABVSO

Weight in Pounds and  
Ounces, each, net.

Size	Fig. 490
1/2	0-15
3/4	1-5
1	2-2
1 1/4	3-1
1 1/2	4-11

Dimensions, Page 28

Screwed ends, left hand threads on outlet can also be supplied if desired.  
Prices on application

Finish No.	Sizes	1/2	3/4	1	1 1/4	1 1/2
No. 1. Rough body, finished trimmings.		3.00	3.45	4.10	5.25	7.00
No. 4. Rough body, nickel-plated all over.		3.40	3.85	4.50	5.65	7.40



**Fig. 491**  
Angle, Male Union  
Code: ABVSR

Weight in Pounds and  
Ounces, each, net.

Size	Fig. 491	Fig. 497
1/2	1-2	1-4
3/4	1-12	1-13
1	2-12	2-14
1 1/4	3-12	4-1
1 1/2	5-6	6-0

Dimensions, Page 28



**Fig. 497**  
Globe, Male Union  
Code: ABVTG

Male or female unions with left hand threads can also be supplied.  
Prices on application

Finish No.	Sizes	1/2	3/4	1	1 1/4	1 1/2
No. 6. Rough body, finished trimmings.		3.30	3.90	4.70	6.00	8.00
No. 9. Rough body, nickel-plated all over.		3.70	4.30	5.10	6.40	8.40



# JENKINS BRONZE VALVES

## RADIATOR GLOBE AND ANGLE Regular Pattern, with Lock Shield Fitted with No. 119 Disc for Steam Service



**Fig. 492**  
Angle, Screwed  
Code: ABVST

Weight in Pounds and  
Ounces, each, net.

Size	Fig. 492
1/2.....	0-14
3/4.....	1-3
1.....	2-0
1 1/4.....	2-14
1 1/2.....	4-5

Dimensions, Page 28

Regularly supplied with right hand threads on outlet. Left hand supplied if desired.  
Prices on application.



**Fig. 496**  
Angle, with Union  
Code: ABVTE

Weight in Pounds and  
Ounces, each, net.

Size	Fig. 496	Fig. 498
1/2...	1-0	1-2
3/4...	1-10	1-11
1.....	2-9	2-10
1 1/4...	3-7	3-14
1 1/2...	5-3	5-12

Dimensions, Page 28



**Fig. 498**  
Globe, with Union  
Code: ABVTI

Regularly supplied with right hand threads on union. Left hand supplied if desired.  
Prices on application.

Prices of Figs. 492, 496 and 498 are the same as for the corresponding sizes and finishes of Figs. 490, 491 and 497 illustrated on page 26. There is an extra charge for keys, as listed below.



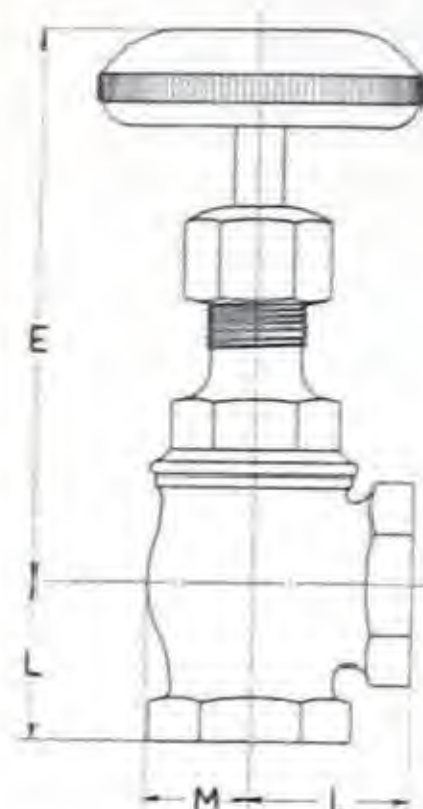
**Fig. 171**  
Tee Handle Key  
Code: ABUEH

Sizes of Valves.....	1/2	3/4	1	1 1/4	1 1/2
Fig. 171.....	.45	.45	.60	.60	.80
Number of Key.....	1	2	3	3	4
Size of Square.....	1/4	5/16	11/32	11/32	27/64
Wgt., ozs.....	1 1/2	2 1/2	3 1/2	3 1/2	4 1/2

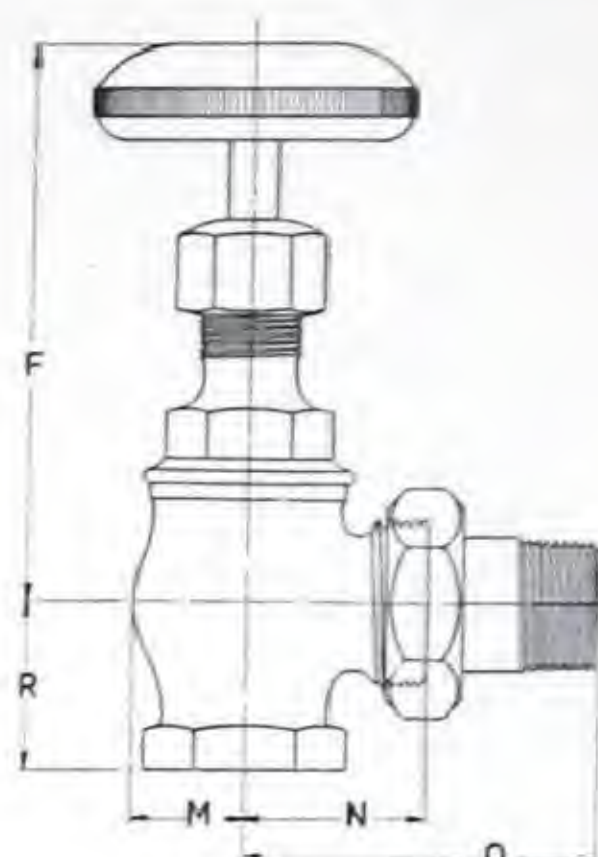


# JENKINS BRONZE VALVES

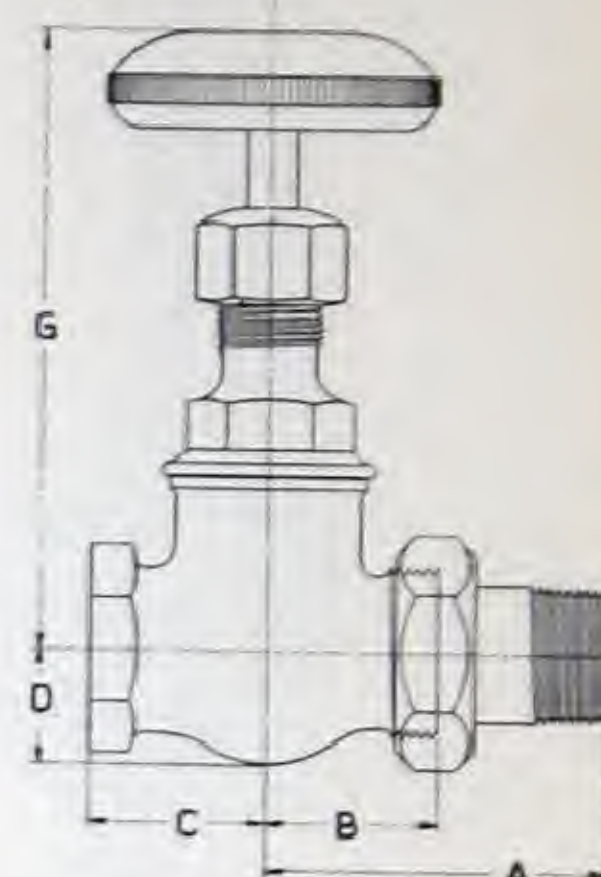
## RADIATOR Regular Pattern Dimensions (Valves listed on pages 25 to 27)



Angle Pattern



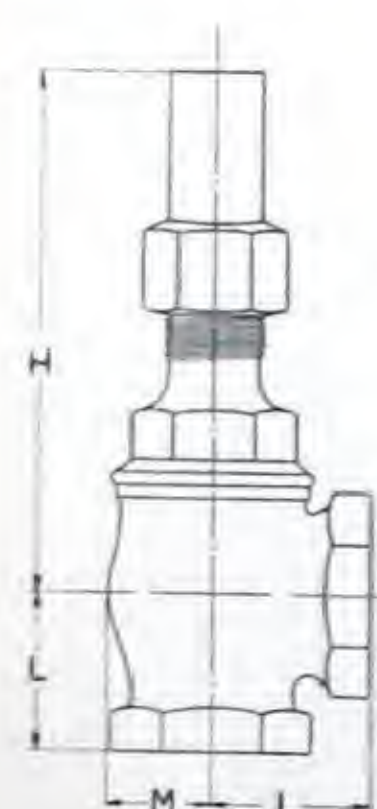
Angle Pattern



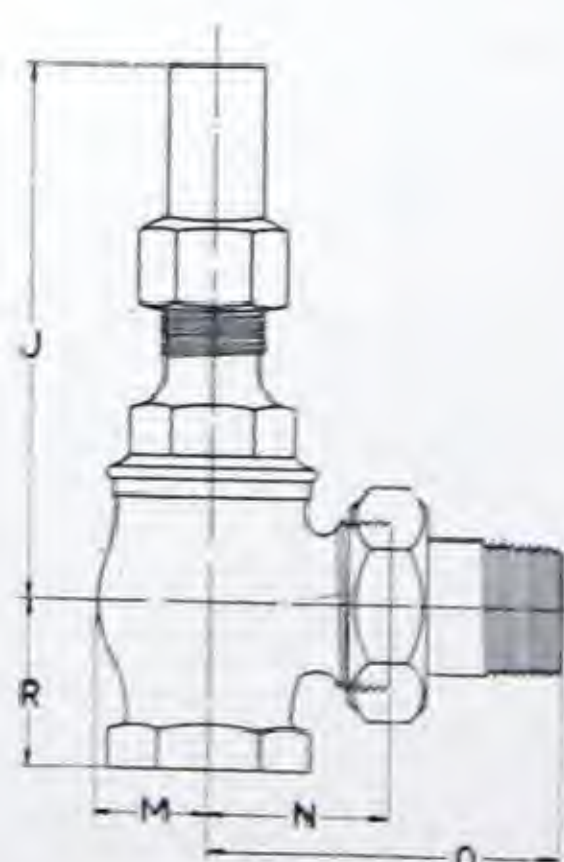
Globe Pattern

### Jenkins Globe and Angle Radiator Valves, Dimensions, Inches

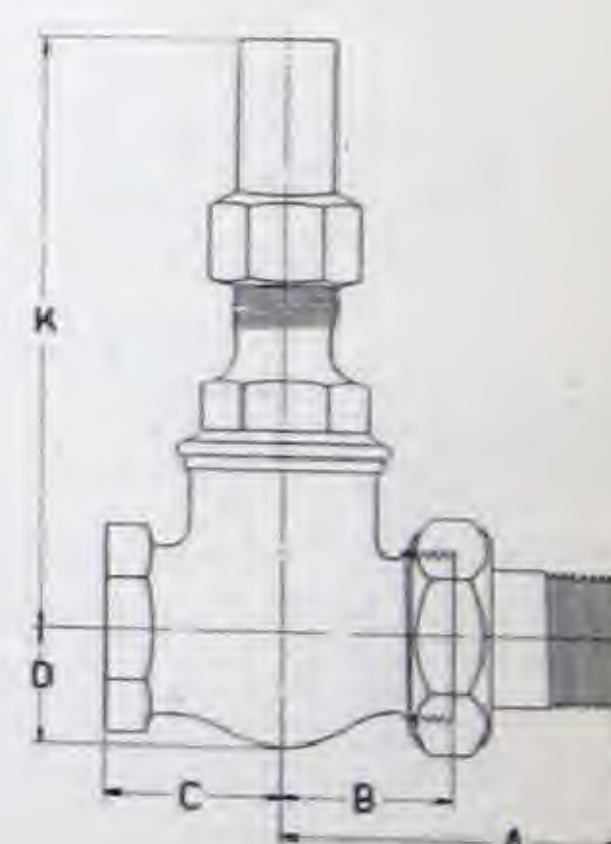
Sizes . . . . .	1/2	3/4	1	1 1/4	1 1/2
A—Centre to end of union . . . . .	2 5/16	2 21/32	3	3 13/32	3 3/4
B—Centre to face, union end of body . . . . .	1 1/8	1 5/16	1 17/32	1 27/32	2 1/16
C—Centre to face, screwed end . . . . .	1 1/8	1 3/8	1 21/32	1 7/8	2 3/16
D—Radius of body globe . . . . .	3/4	7/8	1 3/32	1 1/4	1 15/32
E—Centre of body to top of hand wheel when open . . . . .	3 5/8	4 5/16	5 1/8	5 11/16	6 15/16
F—Centre of body to top of hand wheel when open . . . . .	3 5/8	4 3/8	5 5/16	5 9/16	6 3/4
G—Centre of body to top of hand wheel when open . . . . .	4 1/16	4 13/16	5 5/8	6 1/2	7 7/16
H—Centre of body to top of lock shield . . . . .	3 1/2	4 1/16	4 7/8	5 1/2	6 7/16
J—Centre of body to top of lock shield . . . . .	3 1/2	4 1/8	5	5 5/16	6 5/16
K—Centre of body to top of lock shield . . . . .	3 15/16	4 1/2	5 3/8	6	6 15/16
L—Centre to face, screwed end . . . . .	1 1/16	1 1/4	1 7/16	1 23/32	2 1/32
M—Radius of body, angle . . . . .	25/32	7/8	1 3/32	1 1/4	1 15/32
N—Centre to face, union end of body . . . . .	1 3/16	1 13/32	1 21/32	1 7/8	2 3/32
O—Centre to end of union . . . . .	2 3/8	2 3/4	3 1/8	3 7/16	3 25/32
R—Centre to face, screwed union body . . . . .	1 1/16	1 5/16	1 1/2	1 19/32	1 27/32



Angle Pattern



Angle Pattern



Globe Pattern



# JENKINS BRONZE VALVES

## RADIATOR

### Heavy Pattern, Details of Construction

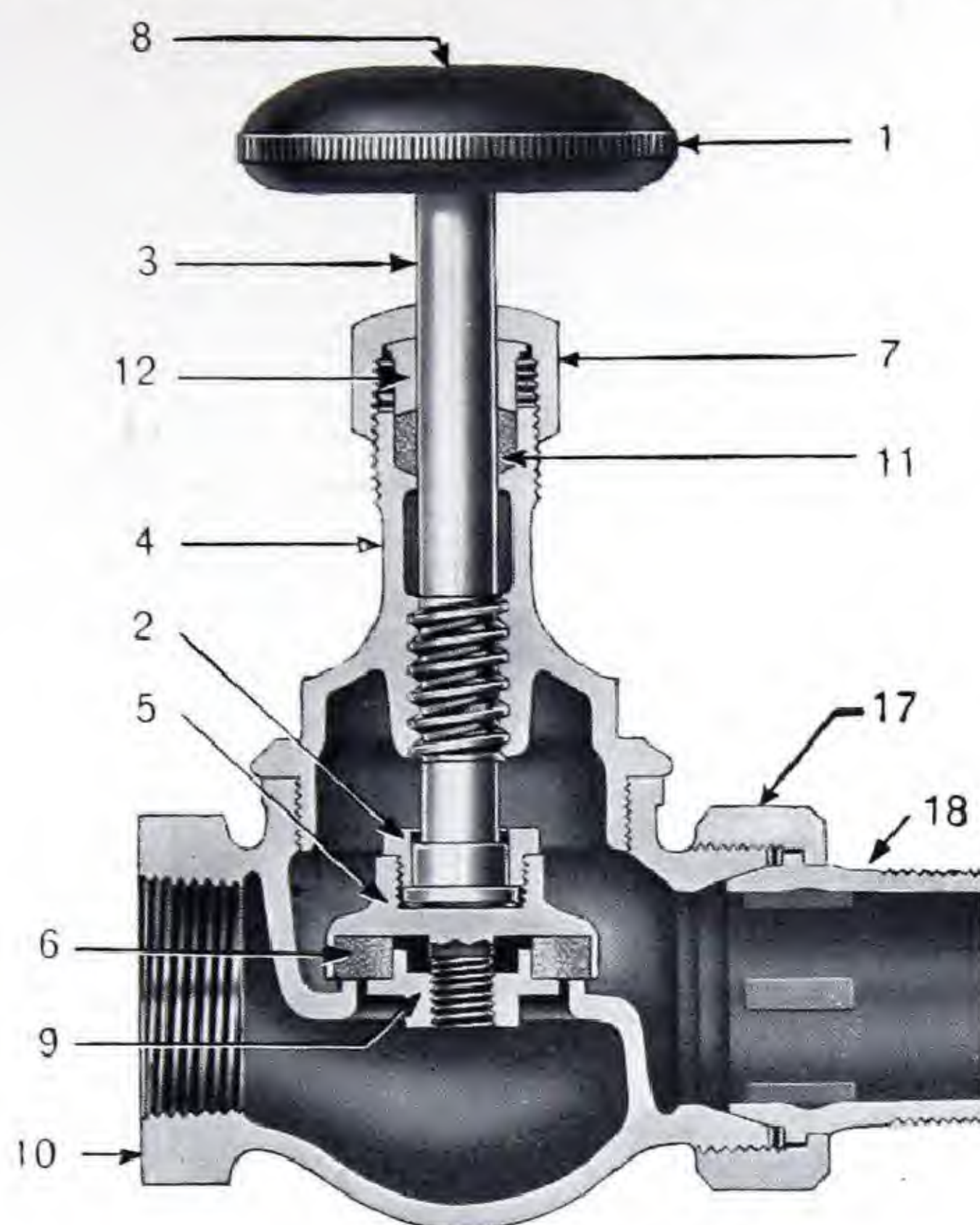


Fig. 167 Globe with Male Union  
Sectional View

- |   |   |
|---|---|
| 1. WHEEL.   | 7. PACKING NUT—liberal in proportions. Holds gland in position. |
| 2. LOCK NUT—holds disc-holder to spindle.                                 | 8. WHEEL NUT.   |
| 3. SPINDLE—manganese bronze, deep-threaded.                               | 9. DISC NUT—secures disc in holder.                             |
| 4. BONNET—screws into top of body.  | 10. BODY—well proportioned in every detail.                     |
| 5. DISC HOLDER—accommodates disc.   | 11. PACKING—ample quantity.                                     |
| 6. JENKINS DISC—renewable composition. Insures a tight and leakless seat. | 12. GLAND—compresses packing.                                   |
|   | 17. UNION NUT—enables easy installation.                        |
|   | 18. NIPPLE—with deep clean-cut threads.                         |

Heavy Radiator Valves are made from the same patterns and embody all the advantages of Fig. 106 and Fig. 108 Jenkins Standard Bronze Valves listed on pages 18 and 19.

A well-constructed radiator valve is an essential part of a good heating system. The ordinary light weight, poorly made radiator valve usually develops trouble when subjected to strains due to expansion, contraction, shifting and settling of piping.

Jenkins Valves open easily and close tight, due to resiliency of Jenkins Rubber Composition Disc. Ample packing around spindle prevents leakage at that point. They are regularly fitted with black composition hand wheels, but can be furnished with bronze hand wheels or with lock shield and key. The various patterns of Jenkins Radiator Valves are listed on pages 29 to 35. See also Jenkins Regular Pattern Radiator Valves listed on pages 25 to 28.

*In addition to the various finishes of Jenkins Radiator Valves as shown on the next pages, any of these valves can be furnished finished and chromium-plated all over. Prices on application.*



# JENKINS BRONZE VALVES

## RADIATOR GLOBE AND ANGLE Heavy Pattern, With Fibre-Composition Wheel

Fitted with No. 119 Disc for Steam Service

Weight in Pounds and  
Ounces, each, net.



**Fig. 165**  
Globe, Screwed  
Code: ABUDM

Sizes	Fig. 165	Fig. 166
1/4	0-12	0-12
3/8	1-1	1-1
1/2	1-9	1-9
3/4	2-8	2-5
1	3-8	3-3
1 1/4	5-0	4-12
1 1/2	6-6	6-10
2	10-0	11-2

Dimensions, Page 35



**Fig. 166**  
Angle, Screwed  
Code: ABUDS

Regularly supplied with right hand threads on outlet. Left hand supplied if desired.  
Prices on application

Finish No.	Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
1. Rough body, finished trimmings		1.50	1.85	2.00	2.50	3.20	4.50	6.25	10.50
2. Finished all over		2.00	2.25	2.50	3.00	3.75	5.25	7.25	11.75
3. Rough body, nickel-plated trimmings		1.80	2.15	2.30	2.80	3.50	4.80	6.55	10.80
4. Rough body, nickel-plated all over		1.90	2.25	2.40	2.90	3.60	4.90	6.65	10.90
5. Finished and nickel-plated all over		2.40	2.70	2.90	3.40	4.15	5.65	7.65	12.15

Weight in Pounds and  
Ounces, each, net.



**Fig. 167**  
Globe, with Union  
Code: ABUDV

Sizes	Fig. 167	Fig. 168
1/4	1-0	1-0
3/8	1-4	1-4
1/2	1-15	1-15
3/4	3-0	3-0
1	4-4	4-1
1 1/4	6-0	5-15
1 1/2	7-5	7-13
2	12-1	12-8

Dimensions, Page 35



**Fig. 168**  
Angle, with Union  
Code: ABUDY

Regularly supplied with right hand threads on union. Left hand supplied if desired.  
Prices on application

Finish No.	Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
6. Rough body, finished trimmings		2.60	2.60	2.75	3.50	4.30	5.85	7.75	12.60
7. Finished all over		3.00	3.00	3.20	4.00	4.80	6.40	8.75	13.85
8. Rough body, nickel-plated trimmings		2.90	2.90	3.05	3.80	4.60	6.15	8.05	12.90
9. Rough body, nickel-plated all over		3.00	3.00	3.15	3.90	4.70	6.25	8.15	13.00
10. Finished and nickel-plated all over		3.45	3.45	3.60	4.40	5.20	6.80	9.15	14.25



J E N K I N S   B R O N Z E   V A L V E S

RADIATOR GLOBE AND ANGLE  
Heavy Pattern, With Lock Shield  
Fitted with No. 119 Disc for Steam Service

Weight in Pounds and  
Ounces, each, net.



Fig. 169g  
Globe, Screwed  
Code: ABUED

Sizes.....	Fig. 169g	Fig. 169
1/4.....	0-12	0-12
3/8.....	0-15	0-15
1/2.....	1-7	1-6
3/4.....	2-6	2-2
1.....	3-1	2-15
1 1/4.....	4-10	4-7
1 1/2.....	6-4	6-1
2.....	10-4	10-4

Dimensions, Page 35



Fig. 169  
Angle, Screwed  
Code: ABUEB

Regularly supplied with right hand threads on outlet. Left hand supplied if desired.  
Prices on application

Finish No.....	Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
1. Rough body, finished trimmings.....		1.50	1.85	2.00	2.50	3.20	4.50	6.25	10.50
2. Finished all over.....		2.00	2.25	2.50	3.00	3.75	5.25	7.25	11.75
3. Rough body, nickel-plated trimmings.....		1.80	2.15	2.30	2.80	3.50	4.80	6.55	10.80
4. Rough body, nickel-plated all over.....		1.90	2.25	2.40	2.90	3.60	4.90	6.65	10.90
5. Finished and nickel-plated all over.....		2.40	2.70	2.90	3.40	4.15	5.65	7.65	12.15

There is an extra charge for keys, as listed below.

Weight in Pounds and  
Ounces, each, net.



Fig. 170g  
Globe, with Union  
Code: ABUEG

Sizes.....	Fig. 170g	Fig. 170
1/4.....	0-9	1-0
3/8.....	1-0	1-2
1/2.....	1-13	1-9
3/4.....	2-12	2-12
1.....	4-1	3-13
1 1/4.....	5-11	5-7
1 1/2.....	7-11	7-6
2.....	11-9	11-3

Dimensions, Page 35

Prices of Figs. 170g and 170 are the same as for the corresponding sizes of Figs. 167 and 168 illustrated on page 30. There is an extra charge for keys, as listed below.



Fig. 170  
Angle, with Union  
Code: ABUEF



Fig. 171  
Tee Handle Key  
Code: ABUEH

Sizes of Valves...	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Fig. 171.....	.45	.45	.45	.60	.60	.80	.80	.80
Number of Key..	1	1	2	3	3	4	4	5
Size of Square...	1/4	1/4	5/16	11/32	11/32	27/64	27/64	33/64
Wgt., ozs.....	1 1/2	1 1/2	2 1/2	3 1/2	3 1/2	4 1/2	4 1/2	8



# J E N K I N S   B R O N Z E   V A L V E S

## RADIATOR CORNER

Heavy Pattern, With Fibre Composition Wheel  
Fitted with No. 119 Disc for Steam Service

Weight in Pounds and  
Ounces, each, net.



**Fig. 174**  
Right Hand,  
Screwed  
Code: ABUER

Sizes	Figs. 174 or 175
1/2	1-8
3/4	2-10
1	3-6
1 1/4	5-0
1 1/2	6-6
2	11-12

**Regularly supplied with right hand threads  
on outlet. Left hand supplied if desired.  
Prices on application**



**Fig. 175**  
Left Hand,  
Screwed  
Code: ABUES

Finish No.	Sizes	1/2	3/4	1	1 1/4	1 1/2	2
1. Rough body, finished trimmings		2.25	2.75	3.50	5.00	7.00	11.55
2. Finished all over		2.75	3.25	4.25	5.75	8.00	12.95
3. Rough body, nickel-plated trimmings		2.55	3.05	3.80	5.30	7.30	11.85
4. Rough body, nickel-plated all over		2.65	3.15	3.90	5.40	7.40	11.95
5. Finished and nickel-plated all over		3.15	3.65	4.65	6.15	8.40	13.35

Dimensions, Page 35



**Fig. 176**  
Right Hand,  
with Male Union  
Code: ABUET

Weights in Pounds and  
Ounces, each, net.

Sizes	Figs. 176 or 177
1/2	1-14
3/4	3-1
1	4-0
1 1/4	5-15
1 1/2	7-9
2	12-10

**Regularly supplied with right hand  
threads on union. Left hand supplied  
if desired. Prices on application**



**Fig. 177**  
Left Hand,  
with Male Union  
Code: ABUEW

Finish No.	Sizes	1/2	3/4	1	1 1/4	1 1/2	2
6. Rough body, finished trimmings		3.05	3.85	4.75	6.45	8.55	13.85
7. Finished all over		3.50	4.40	5.30	7.05	9.65	15.25
8. Rough body, nickel-plated trimmings		3.35	4.15	5.05	6.85	8.85	14.15
9. Rough body, nickel-plated all over		3.45	4.25	5.15	6.95	8.95	14.25
10. Finished and nickel-plated all over		3.90	4.80	5.70	7.45	10.05	15.65

Dimensions, Page 35



J E N K I N S   B R O N Z E   V A L V E S

RADIATOR OFFSET CORNER  
Heavy Pattern, With Fibre Composition Wheel  
Fitted with No. 119 Disc for Steam Service



Fig. 178  
Right Hand,  
Screwed  
Code: ABUFA

Weight in Pounds and  
Ounces, each, net.

Sizes	Figs. 178 or 179
1/2.....	1-13
3/4.....	2-8
1.....	3-8
1 1/4.....	4-14
1 1/2.....	7-6
2.....	12-1



Fig. 179  
Left Hand,  
Screwed  
Code: ABUFC

Regularly supplied with right hand threads on  
outlet. Left hand supplied if desired. Prices on  
application.

Finish No.....	Sizes	1/2	3/4	1	1 1/4	1 1/2	2
1. Rough body, finished trimmings.....		2.25	2.75	3.50	5.00	7.00	11.55
2. Finished all over.....		2.75	3.25	4.25	5.75	8.00	12.95
3. Rough body, nickel-plated trimmings.....		2.55	3.05	3.80	5.30	7.30	11.85
4. Rough body, nickel-plated all over.....		2.65	3.15	3.90	5.40	7.40	11.95
5. Finished and nickel-plated all over.....		3.15	3.65	4.65	6.15	8.40	13.35

Dimensions, Page 35



Fig. 180  
Right Hand,  
with Male Union  
Code: ABUFE

Weight in Pounds and  
Ounces, each, net.

Sizes	Figs. 180 or 181
1/2.....	2-3
3/4.....	3-2
1.....	4-6
1 1/4.....	6-6
1 1/2.....	8-15
2.....	13-2



Fig. 181  
Left Hand,  
with Male Union  
Code: ABUFI

Regularly supplied with right hand threads  
on union. Left hand supplied if desired.  
Prices on application

Finish No.....	Sizes	1/2	3/4	1	1 1/4	1 1/2	2
6. Rough body, finished trimmings.....		3.05	3.85	4.75	6.45	8.55	13.85
7. Finished all over.....		3.50	4.40	5.30	7.05	9.65	15.25
8. Rough body, nickel-plated trimmings.....		3.35	4.15	5.05	6.85	8.85	14.15
9. Rough body, nickel-plated all over.....		3.45	4.25	5.15	6.95	8.95	14.25
10. Finished and nickel-plated all over.....		3.90	4.80	5.70	7.45	10.05	15.65

Dimensions, Page 35



# J E N K I N S   B R O N Z E   V A L V E S

## RADIATOR OFFSET GLOBE Heavy Pattern, With Fibre Composition Wheel Fitted with No. 119 Disc for Steam Service



**Fig. 173**  
Screwed  
Code: ABUEN

It is the regular custom to furnish these valves with right hand threads on the outlet end of screwed end valves and on tail piece of union end valves. Left hand threads can be supplied when desired. **Prices on application.**



**Fig. 173a**  
With Male Union  
Code: ABUEP

Dimensions, see Page 35

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2
Fig. 173—Weight in lbs. and ozs.....	1-9	2-10	3-9	4-14	7-4	12-6
Fig. 173-A—Weight in lbs. and ozs.....	1-14	3-1	4-3	5-14	8-3	13-11

### List prices of Fig. 173a with Male or Female Union

Finish No.....	Sizes	1/2	3/4	1	1 1/4	1 1/2	2
6. Rough body, finished trimmings.....		3.05	3.85	4.75	6.45	8.55	13.85
7. Finished all over.....		3.50	4.40	5.30	7.05	9.65	15.25
8. Rough body, nickel-plated trimmings.....		3.35	4.15	5.05	6.85	8.85	14.15
9. Rough body, nickel-plated all over.....		3.45	4.25	5.15	6.95	8.95	14.25
10. Finished and nickel-plated all over.....		3.90	4.80	5.70	7.45	10.05	15.65

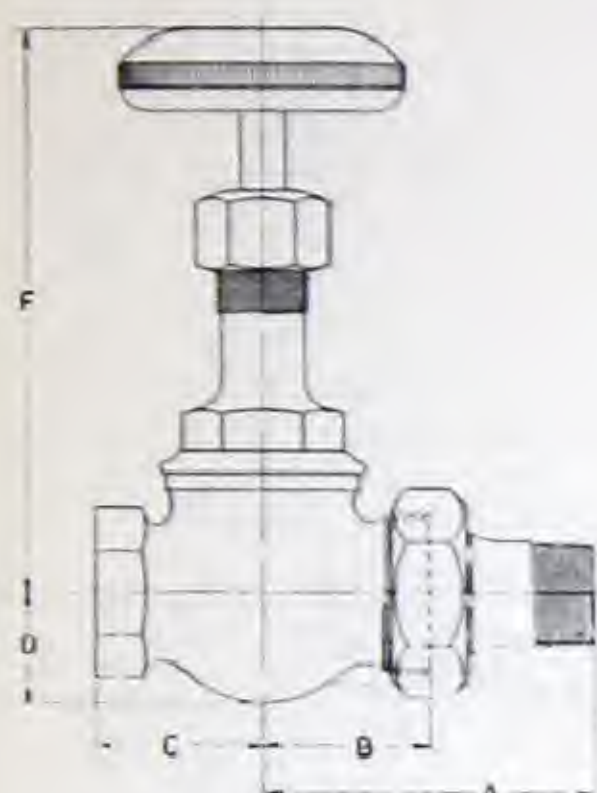
Prices of Fig. 173 furnished on application.



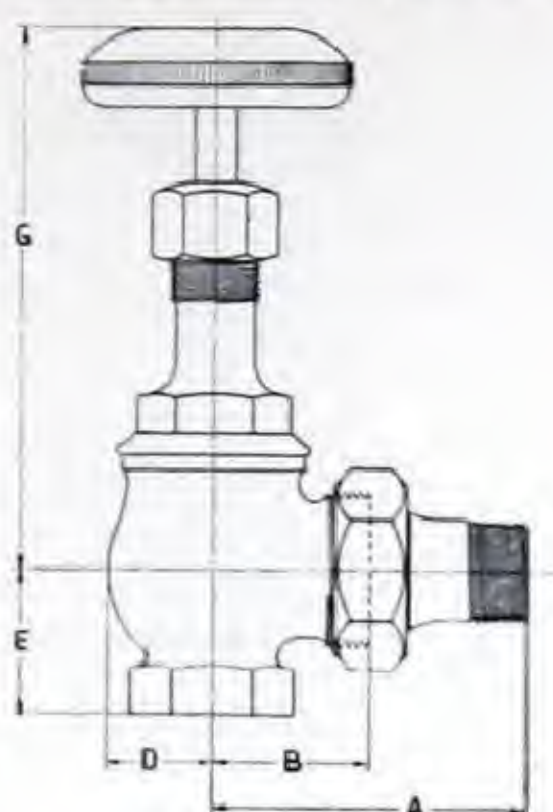
# JENKINS BRONZE VALVES

## RADIATOR

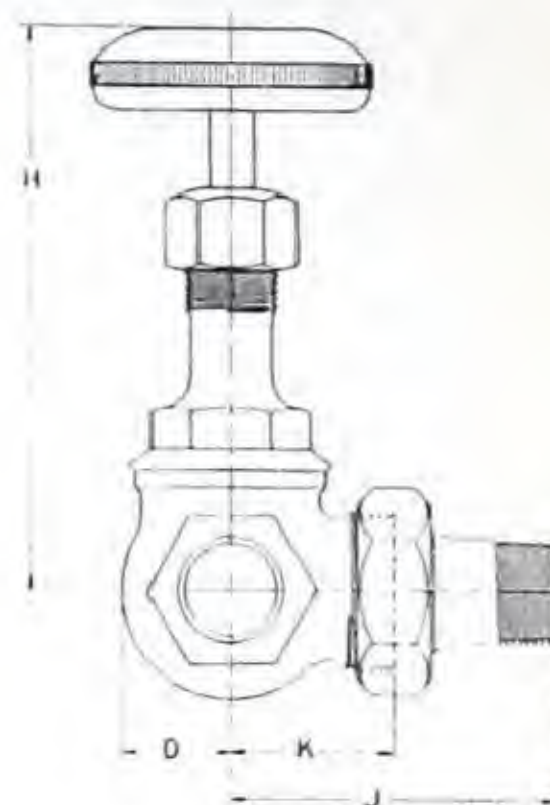
Heavy Pattern Dimensions  
(Valves listed on pages 29 to 34)



Globe Pattern  
Either with  
Composition Wheel or  
Lock Shield



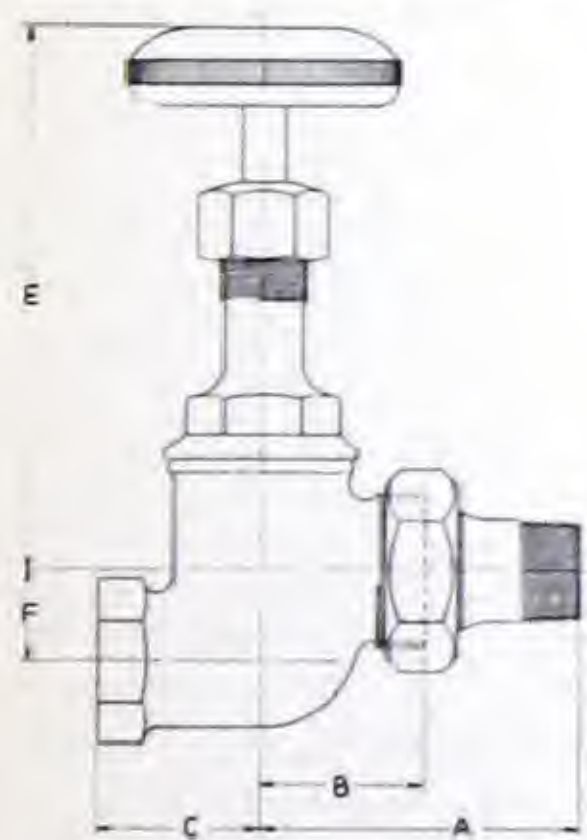
Angle Pattern  
Either with  
Composition Wheel or  
Lock Shield



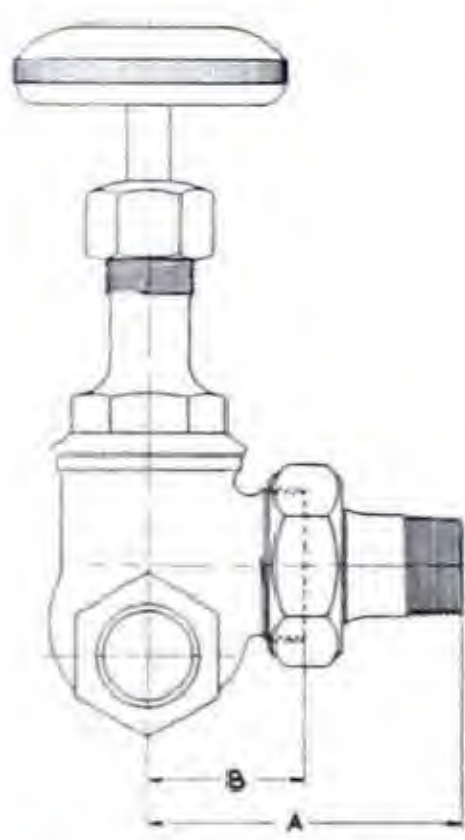
Corner Pattern

### Jenkins Globe, Angle and Corner Radiator Valves, Dimensions, Inches

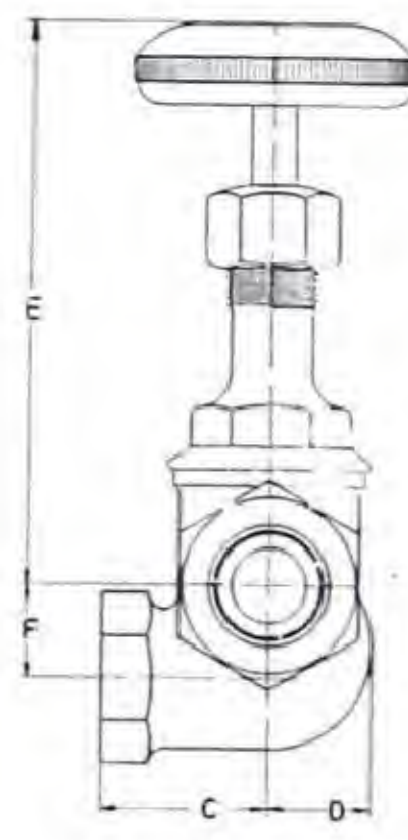
Sizes.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
A—Centre to end of union.....	$2\frac{7}{16}$	$2\frac{7}{16}$	$2\frac{7}{8}$	$3\frac{5}{16}$	$3\frac{11}{16}$	4	$4\frac{9}{16}$	$4\frac{13}{16}$
B—Centre to face, union end of body.....	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$	$2\frac{1}{8}$	$2\frac{7}{16}$	$2\frac{7}{8}$
C—Centre to face, screwed end.....	$1\frac{1}{16}$	$1\frac{3}{16}$	$1\frac{3}{8}$	$1\frac{21}{32}$	$1\frac{29}{32}$	$2\frac{1}{8}$	$2\frac{7}{16}$	$2\frac{7}{8}$
D—Radius of body.....	$\frac{11}{16}$	$\frac{3}{4}$	$\frac{7}{8}$	$1\frac{3}{32}$	$1\frac{1}{4}$	$1\frac{15}{32}$	$1\frac{23}{32}$	$2\frac{3}{16}$
E—Centre to face, screwed end.....	$1\frac{1}{16}$	$1\frac{3}{16}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$2\frac{1}{16}$	$2\frac{1}{4}$	$2\frac{7}{8}$
F—Centre of body to top of hand wheel, when open. Globe.....	$4\frac{1}{4}$	$4\frac{3}{8}$	$5\frac{9}{16}$	$6\frac{1}{8}$	$6\frac{5}{8}$	$7\frac{1}{2}$	$8\frac{5}{16}$	$9\frac{1}{2}$
G—Centre of body to top of hand wheel, when open. Angle.....	$4\frac{1}{8}$	$4\frac{5}{16}$	$5\frac{7}{16}$	$5\frac{3}{4}$	$6\frac{9}{16}$	$7\frac{11}{16}$	$8\frac{1}{8}$	$9\frac{1}{4}$
H—Centre of body to top of hand wheel, when open. Corner.....	$4\frac{3}{16}$	$4\frac{5}{16}$	$5\frac{1}{4}$	$5\frac{7}{8}$	$6\frac{1}{2}$	$7\frac{1}{4}$	$7\frac{7}{8}$	$8\frac{3}{4}$
J—Centre to end of union.....	$2\frac{1}{2}$	$2\frac{5}{8}$	$2\frac{7}{8}$	$3\frac{5}{16}$	$3\frac{11}{16}$	4	$4\frac{1}{2}$	$4\frac{7}{8}$
K—Centre to face, union end of body.....	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$	$2\frac{13}{16}$



Offset Globe Pattern



Offset Corner Pattern



Offset Corner Pattern

### Jenkins Offset Globe and Offset Corner Valves, Dimensions, Inches

Sizes.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
A—Centre to end of union.....	3	$3\frac{3}{8}$	$3\frac{3}{4}$	4	$4\frac{11}{16}$	$5\frac{1}{8}$
B—Centre to face, union end of body.....	$1\frac{1}{2}$	$1\frac{11}{16}$	$1\frac{15}{16}$	$2\frac{1}{8}$	$2\frac{9}{16}$	$3\frac{1}{8}$
C—Centre to face, screwed end.....	$1\frac{1}{2}$	$1\frac{11}{16}$	$1\frac{15}{16}$	$2\frac{1}{8}$	$2\frac{9}{16}$	$3\frac{1}{8}$
D—Radius of body.....	$\frac{7}{8}$	$1\frac{3}{32}$	$1\frac{1}{4}$	$1\frac{15}{32}$	$1\frac{23}{32}$	$2\frac{3}{16}$
E—Centre of outlet to top of hand wheel.....	$5\frac{7}{16}$	$5\frac{3}{4}$	$6\frac{9}{16}$	$7\frac{11}{16}$	$8\frac{1}{8}$	$9\frac{1}{4}$
F—Centre of outlet to centre of inlet.....	$\frac{3}{4}$	1	$1\frac{5}{32}$	$1\frac{3}{16}$	$1\frac{15}{32}$	$1\frac{11}{16}$



# JENKINS BRONZE VALVES

## RADIATOR VALVES AND ELBOWS

For Hot Water Heating Systems  
With Fibre Composition Wheel



Fig. 493, Screwed  
Code: ABVSU



Fig. 494, Male Union  
Code: ABVSY

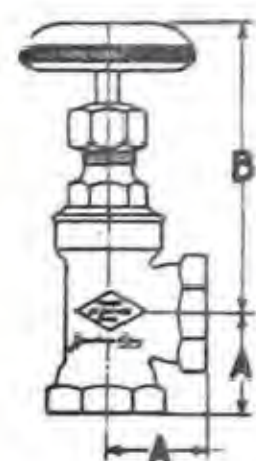


Fig. 495, Elbow  
Code: ABVTA

Like other patterns of Jenkins Radiator Valves, this type has been endorsed by Architects and Engineers. A quarter of a turn gives full opening equal to the nominal diameter of the pipe. When closed a small hole drilled in the plug permits a slight circulation of water through the radiator at all times. While of simple construction this valve has a decidedly neat and handsome appearance, and like all Jenkins Valves is fully guaranteed. Jenkins Radiator Elbows (Fig. 495) have the same centre to face dimensions as the male union valves (Fig. 494) and have ball union nipple joint. Both valves and elbows are regularly supplied, rough body, nickel plated all over. Other finishes including finished and chromium plated all over can also be supplied.

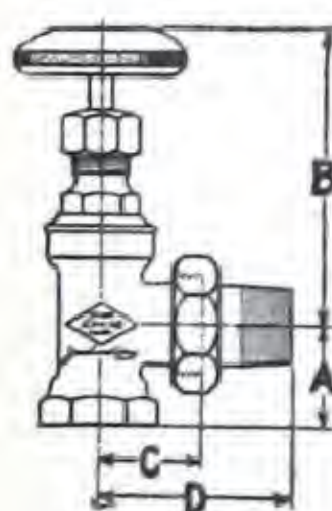
### Prices on application

Weight in Pounds and Ounces, each, net.



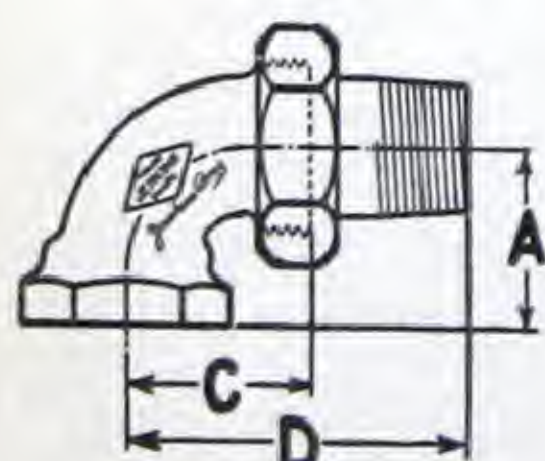
Sizes	Fig. 493	Fig. 494	Fig. 495
1/2.....	0-11	0-14	0-7
3/4.....	1-0	1-5	0-11
1.....	1-11	2-3	0-15
1 1/4.....	2-6	3-2	1-9
1 1/2.....	3-8	4-7	2-3

### Dimensions, Inches



Sizes.....	1/2	3/4	1	1 1/4	1 1/2
A—Centre to face, screwed.....	1 1/8	1 11/32	1 5/8	1 13/16	2 3/32
B—Centre to top of wheel.....	3 7/16	3 11/16	4 7/16	5 3/16	5 3/4
C—Centre to face, union end of body.....	1 3/16	1 13/32	1 11/16	1 7/8	2 5/32
D—Centre to end of union.....	2 3/8	2 3/4	3 5/32	3 7/16	3 27/32

### List Prices



Sizes.....	1/2	3/4	1	1 1/4	1 1/2
Fig. 493.....	2.95	3.25	3.90	5.00	6.30
Fig. 494.....	3.25	3.70	4.50	5.75	7.30
Fig. 495.....	1.75	2.00	2.50	3.30	4.25



# JENKINS BRONZE VALVES

## RADIATOR VALVES

### For Hot Water Heating Systems With Lock Shield



**Fig. 488, Screwed**  
Code: ABVSL

Weight in Pounds and  
Ounces, each, net

Sizes	Fig. 488	Fig. 489
1/2.....	1-4	1-5
3/4.....	2-2	2-1
1.....	3-2	2-13
1 1/4.....	4-4	4-2
1 1/2.....	6-1	5-12



**Fig. 489, Male Union**  
Code: ABVSN

These valves are exactly the same pattern as the valves listed on page 36. A quarter of a turn gives full opening equal to the nominal diameter of the pipe. When closed a small hole drilled in the plug permits a slight circulation of water through the radiator at all times. While of simple construction, this valve has a decidedly neat and handsome appearance, and like all Jenkins Valves is fully guaranteed. Valves are regularly supplied, rough body, nickel plated all over. Other finishes including finished and chromium plated all over can also be supplied.

### Prices on application

Sizes.....	1/2	3/4	1	1 1/4	1 1/2
Fig. 488.....	2.95	3.25	3.90	5.00	6.30
Fig. 489.....	3.25	3.70	4.50	5.75	7.30

There is an extra charge for keys, as listed below.

### Dimensions, Inches

Sizes.....	1/2	3/4	1	1 1/4	1 1/2
Centre to face, screwed.....	1 1/8	1 11/32	1 5/8	1 13/16	2 3/32
Centre to top of lock shield.....	2 13/16	3 1/16	3 11/16	4 3/8	4 7/8
Centre to face, union end of body.....	1 3/16	1 13/32	1 11/16	1 7/8	2 5/32
Centre to end of union.....	2 3/8	2 3/4	3 5/32	3 7/16	3 27/32



**Fig. 171**  
Tee Handle Key  
Code: ABUEH

Sizes of Valves.....	1/2	3/4	1	1 1/4	1 1/2
Fig. 171.....	.45	.45	.45	.60	.60
Number of Key.....	1	1	2	3	3
Size of Square.....	1/4	1/4	5/16	11/32	11/32
Wgt., ozs.....	1 1/2	1 1/2	2 1/2	3 1/2	3 1/2



## AUTOMATIC AIR For Emitting Air From Radiators



Fig. 190  
Sectional View

### Details of Construction

- A—Inlet, threaded for connecting to radiator.
- B—Adjusting Screw.
- C—Expansion Plug.
- D—Outlet, tapped to connect drip cup or return pipe.



Fig. 190  
Automatic Air,  
Male Inlet, Female Outlet  
Code: ABUGI



Fig. 191  
Drip Cup  
Code: ABUGK

### Fig. 190, Finished and Nickel-Plated

Sizes	$\frac{1}{8}$	$\frac{1}{4}$
Fig. 190, price per dozen	7.50	7.50
Wgt., lbs. and ozs., each	0-4 $\frac{1}{2}$	0-4 $\frac{1}{2}$

### Fig. 191, Finished and Nickel-Plated

Fig. 191, price per dozen	3.00
---------------------------	------

### Adjusting Screw and Expansion Plug

Plug and Screw (Parts B and C in Sectional View), each	.25
--	-----



Fig. 193  
Automatic Air,  
Male Inlet, Union Outlet  
Code: ABUGR

### Fig. 193, Finished and Nickel-Plated

Sizes	$\frac{1}{8}$	$\frac{1}{4}$	Weight lbs. and ozs. each
Fig. 193 with $\frac{1}{8}$ " union, price per dozen	9.50		0-5
Fig. 193 with $\frac{1}{4}$ " union, price per dozen	10.00	10.00	0-6 $\frac{1}{2}$



J E N K I N S    B R O N Z E    V A L V E S

SELCLO—REVERSE ACTION VALVE

Regularly Fitted with No. 119 Disc for 150 Pounds Steam Working Pressure  
For 250 Pounds Oil, Water, Gas Working Pressure use No. 936 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Number 0384-123456



Fig. 357  
Selclo  
Code: ABVCY

The Selclo is designed for hard usage. Originally designed as a blower valve for use in railroad roundhouses, where it is very successful, it has been found equally desirable for factories, shops and plants where different people, often careless or hurried, have occasion to operate and where, in consequence, the service is exceptionally severe. The construction of the valve is such that it is mechanically impossible to crush the disc or seat in opening and closing. The valves are suitable for use on either steam, air or water lines. In a horizontal line they should be installed so the hand wheel is below the pipe.

Turning the hand wheel to the left, the spindle will push the disc holder off the seat and open the valve. Turning the hand wheel to the right, releases the spindle from the disc holder and the spring forces the disc holder to the seat with a steady, even pressure. The combined action of spring and pressure hold the valve closed.

*These valves are not recommended for throttling.*

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2
Fig. 357.....	4.75	5.25	6.30	8.40	12.00	16.25
Wgt., lbs. and oz.....	1-11	2-8	3-9	5-1	7- 1	11-9

Dimensions, Inches

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2
Face to face.....	2 3/4	3 5/16	3 13/16	4 1/4	4 7/8	5 3/4
Centre to top of cap.....	1 3/4	2 1/16	2 1/4	2 1/2	2 7/8	3 7/16
Centre to top of wheel, closed.....	4 3/16	5 1/8	5 3/8	5 3/8	6 1/4	7
Diam. of hand wheel.....	2 7/16	2 7/16	2 13/16	3	3 7/16	4 3/8

List Price of Parts

Part No.....	Sizes	1/2	3/4	1	1 1/4	1 1/2	2
1. Wheel.....		.15	.20	.20	.30	.35	.40
3. Spindle.....		.75	.75	.85	1.00	1.35	1.55
4. Hub.....		.75	.80	.95	1.15	2.15	2.45
5. Disc Holder.....		.35	.35	.45	.70	.85	1.10
7. Packing nut.....		.20	.20	.20	.25	.30	.40
8. Wheel nut.....		.05	.05	.05	.05	.05	.05
9. Disc guide nut.....		.10	.15	.15	.25	.35	.45
11. Packing.....		.05	.05	.06	.06	.06	.06
12. Gland.....		.05	.05	.05	.10	.10	.15
13. Spring.....		.15	.15	.15	.25	.25	.40
14. Cap.....		.50	.65	.85	1.40	1.50	2.35

For list price of Disc, part 6, see page 212.

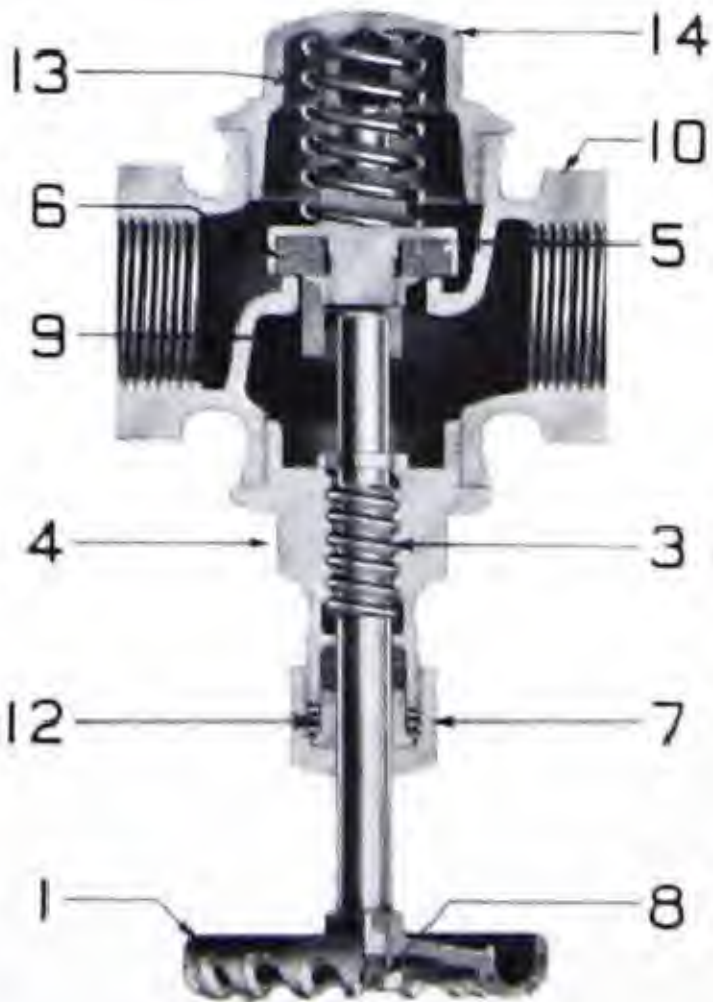


Fig. 357  
Sectional View



# JENKINS BRONZE VALVES

## QUICK-OPENING, SELF-CLOSING

Figs. 121-R, 121, 121-B For Air, Gas or Steam Service

Fig. 712 For Hot or Cold Water Service



Fig. 121 Pattern conforms to Canadian Interprovincial Specifications Registration Number 0137-123456



**Fig. 121-R**  
Whistle Valve  
With Reversed Self-Closing  
Lever for Downward Pull  
Code: ABTWU



**Fig. 121**  
Whistle Valve  
With Self-Closing Lever  
Code: ABTWO



**Fig. 121-B**  
Whistle Valve  
With Push Button  
For Moderate Pressure  
Steam, Air, Gas, Water  
Code: ABTWR



**Fig. 712—Sectional View**  
Showing Valve  
in Open Position  
Code: ABWNF

Figs. 121 and 121-R are spring-loaded self-closing valves fitted with a yoke and lever for hand operation. They are opened by a short pull of the lever which bears on the end of the spindle, forcing disc holder off the seat. Releasing the lever automatically closes the valve. Originally designed as a whistle valve, these valves have found application in a diversity of industries including can sterilizing, washing machines, cooking vats, barrel steaming, soot blower and other places where quick on and off operation of steam, air, gas and vacuum applications are essential.

These valves are made of high grade valve bronze; spindle of manganese bronze; lever of malleable iron, enameled green. All yokes are adjustable to any position permitting the operating lever to be swung around to any desired position. They are regularly fitted with No. 936 Composition Disc for pressures to 250 pounds air or gas service. For steam working pressures to 150 pounds, No. 119 Composition Disc should be used.

**Fig. 121-B** is similar in construction to the valves listed above excepting that it is opened by pressing on push button. Releasing pressure on the button automatically closes the valve. It is made in sizes  $\frac{3}{8}$ " to 1" and is recommended for moderate pressures only. It is regularly fitted with a No. 946 Jenkins Disc.

**Fig. 712** is similar in construction to Fig. 720 listed on pages 44 and 45, excepting that it is fitted with a self-closing type of lever. Has the same cap and plunger arrangement which overcomes objectionable water-hammer. Recommended for service in bathing establishments on shower baths; in garages for automobile washing, and numerous other places where a quick action valve with these advantages is required. Fig. 712 is regularly fitted with No. 936 Disc for hot or cold water pressures between 15 and 150 pounds.



J E N K I N S   B R O N Z E   V A L V E S

QUICK-OPENING, SELF-CLOSING

Figs. 121-R, 121, 121-B for Air, Gas or Steam  
Fig. 712 for Hot or Cold Water

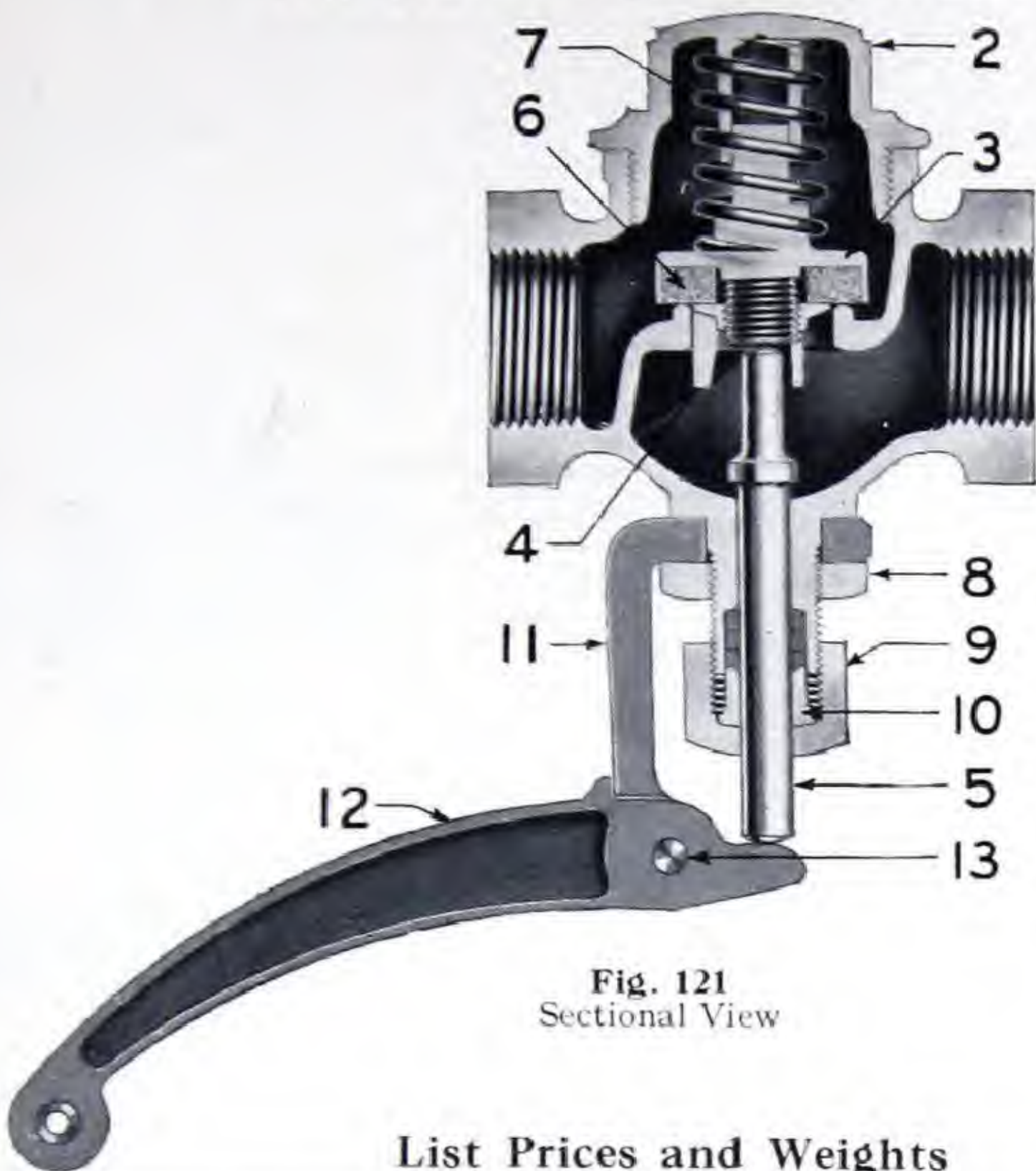


Fig. 121  
Sectional View

List Prices and Weights

Sizes.....	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Figs. 121-R, 121.....	3.50	4.00	5.00	6.25	8.00	10.75	15.00	*
Wgt., lbs. and oz.....	0-14	1-9	2-6	3-7	5-1	7-6	11-3	16-2
Fig. 121-B.....	Prices on application.....							
Wgt., lbs. and oz.....	0-13	1-7	2-3	3-0	.....	.....	.....	.....
Fig. 712.....	.....	7.00	9.00	10.00	12.00	15.00	20.00	28.00
Wgt., lbs. and oz.....	.....	1-15	2-15	4-1	6-6	8-15	14-1	20-12

Dimensions, Inches

Sizes.....	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face.....	2 3/8	2 3/4	3 5/16	3 13/16	4 1/4	4 7/8	5 3/4	6 5/8
Length of lever.....	2 15/16	3 5/8	4 1/8	5 5/16	7 1/16	8	10 1/4	13 1/8
Approx. lift when open, Fig. 121.....	7/32	1/4	9/32	5/16	3/8	7/16	21/64	3/8
Approx. lift when open, Fig. 712.....	.....	1/4	9/32	5/16	11/32	3/8	5/8	11/16

List Prices of Parts, Figs. 121-R, 121, 121-B

Part No.....	Sizes	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
2. Cap.....		.50	.55	.70	.95	1.50	1.60	2.50	*
3. Disc holder.....		.35	.35	.40	.50	.75	.90	1.20	*
4. Disc nut.....		.10	.10	.15	.20	.30	.40	.50	*
5. Spindle.....		.15	.15	.30	.40	.60	.65	.75	*
7. Spring.....		.10	.10	.15	.20	.25	.30	.45	*
8. Yoke nut.....		.20	.20	.20	.25	.30	.30	.30	*
9. Packing nut.....		.15	.20	.20	.20	.25	.40	.40	*
10. Gland.....		.05	.05	.05	.05	.05	.10	.10	*
11. Yoke.....		.45	.50	.55	.60	.70	.85	.95	1.20
12. Lever, Figs. 121-R, 121, 712.....		.20	.25	.30	.40	.45	.55	.70	.90
13. Lever pin.....		.10	.10	.10	.10	.10	.10	.10	.10

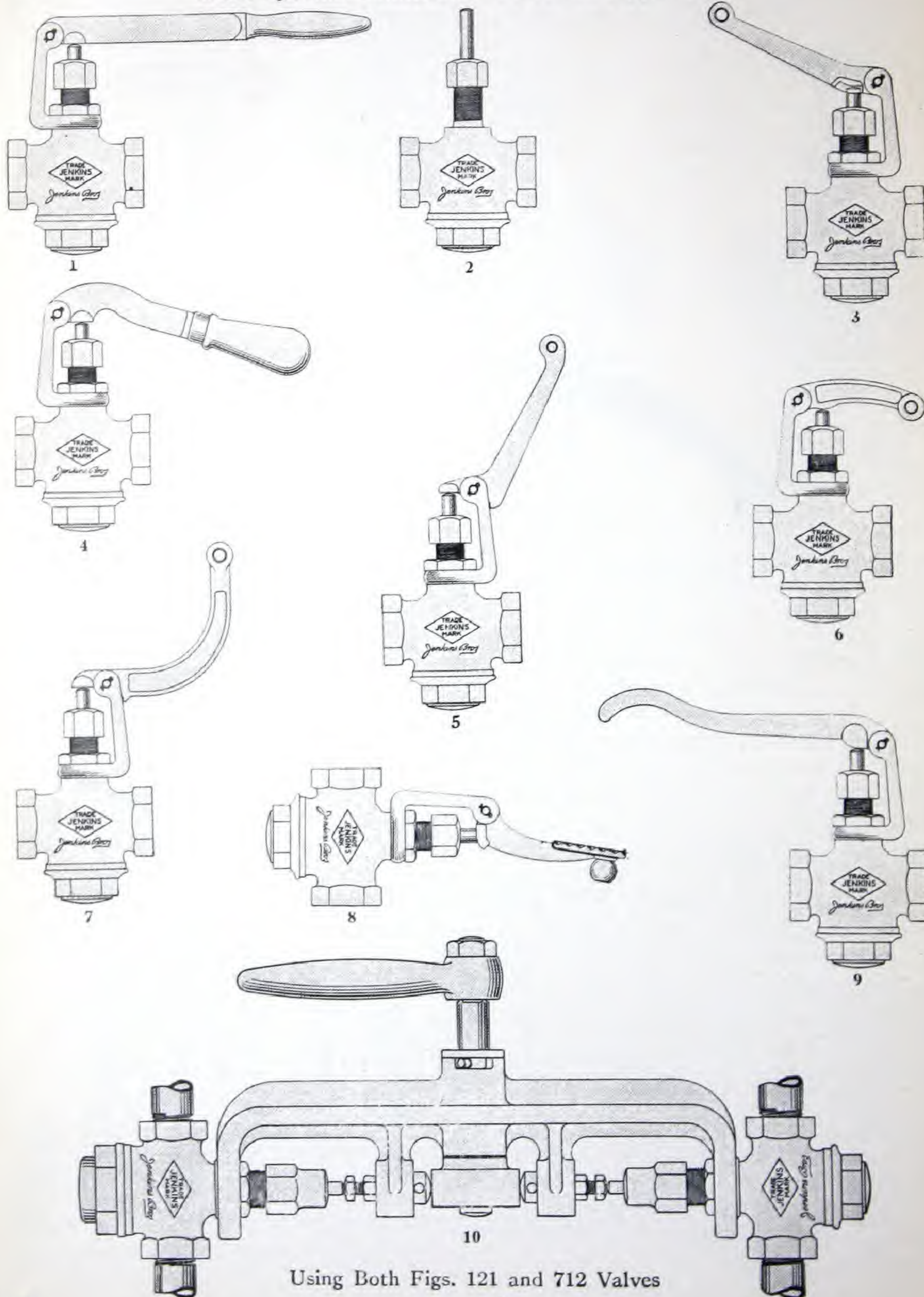
For list price of Disc, part 6, see page 212.  
Parts of Fig. 712 same as Fig. 720 listed on page 45 with the exception of the yoke, lever and lever pin which are shown above.  
\*Prices on application.



# JENKINS BRONZE VALVES

## QUICK-OPENING, SELF-CLOSING Fitted With Special Levers

When so ordered, Jenkins Fig. 121 and 712 Valves can be furnished with Levers to Meet Specific Conditions. Prices on Application



Using Both Figs. 121 and 712 Valves



JENKINS BRONZE VALVES

WHISTLE VALVES

For 300 Pounds Steam Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0138-123456 and 0139-123456



Dimensions and Weights

Sizes.....	3/8	1/2	3/4
Face to face.....	2 3/8	2 3/4	3 1/4
Length of lever.....	3 5/8	4 1/8	5 5/16
Wgt., lbs. and oz.....	1-2	1-14	2-12

Prices on Application

Uniform castings, heavily proportioned, make these valves very suitable on working steam pressure up to 300 pounds. The seats and discs are of **WEARERESIST** Metal and can easily be reground. It is advisable on installations one inch and over, where the pressure exceeds 150 pounds, to use Jenkins Balanced Type for greater ease of operation. It is illustrated below. Both the lever and fulcrum can be adjusted to any desired position.



Fig. 320  
Regular Type  
Code: ABUZJ

Dimensions and Weights

Sizes.....	1	1 1/4	1 1/2	2	2 1/2	3
Face to face..	3 3/4	4 3/8	5	6 1/8	7 1/4	8 3/4
Length of lever	5 5/16	7 1/16	8	10 1/4	13 1/8	16
Wgt.,lbs. & oz.	4-5	6-2	8-9	15-2	20-15	32-0

Prices on Application



Fig. 321  
Balanced Type  
Code: ABUZL





## RAPID ACTION (Patented)

Fig. 720 For Oil, Gasoline or Water Service

Fig. 713 For Air, Gas, Steam or Vacuum Service

### Fig. 720 Pattern

This is a reverse-action globe valve which can be opened and closed instantly without the annoyance of water-hammer. A plunger, operating in a closely fitted cap, or chamber, retards the closing sufficiently to overcome all destructive shock. It is especially recommended for use in laundries, hospitals, hotels, garages and other establishments where quick on and off action is desired. It can be opened or closed almost instantly and remains open without the necessity of set screws, locking devices or other appliances.

The hand lever has an operating cam on one end and when given a quarter pull, bears on the end of the spindle, forcing the disc off the seat. A slight push of the lever disengages the cam of the lever from bearing on end of spindle, and the spring forces the disc to the seat closing the valve.

Fig. 720 is made of high grade bronze; the spindle of rolled manganese bronze rod with hardened steel tip driven into operating end; the spring of phosphor bronze; the yoke of forged steel and lever of malleable iron enameled green.

These valves are regularly fitted with No. 110 Jenkins Composition Disc for hot or cold water pressure above 50 pounds. For cold water pressure up to 50 pounds, No. 946 Disc should be used. For other services and pressures, consult disc schedule on page 213.



**Fig. 720**  
Rapid Action  
For Oil, Gasoline or Water  
Service  
Code: ABWOK



**Fig. 713**  
Rapid Action  
For Air, Gas or Steam  
Service  
Code: ABWNII

### Fig. 713 Pattern

This is a spring-loaded self-closing reverse-action globe valve fitted with yokes and lever for hand operation. It affords the same time-saving advantages for steam, air or gas as Fig. 720, listed above, does for oil, gasoline and water services. The valve is made of high grade valve bronze; the spindle of rolled manganese bronze rod with steel tip inserted; the spring of phosphor bronze; the yoke of forged steel and operating lever of malleable iron enameled green.

*Especially recommended where tightness is essential in preference to all sliding spindle and lever-operated gate valves.*

Fig. 713 is regularly fitted with Jenkins No. 119 Disc for 150 pounds steam pressure. For gas or air services to 250 pounds, No. 936 Disc should be used. For other services, consult disc schedule on page 213.

### List Prices and Weights

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Fig. 720.....	7.00	9.00	10.00	12.00	15.00	20.00	28.00
Wgt., lbs. and oz.....	2-14	4-4	5-10	8-1	10-15	16-12	24-14
Fig. 713.....	7.00	9.00	10.00	12.00	15.00	20.00	28.00
Wgt., lbs. and oz.....	2-10	3-12	4-15	6-1	9-9	12-7	20-1



J E N K I N S   B R O N Z E   V A L V E S

RAPID ACTION (Patented)

Fig. 720 For Oil, Gasoline or Water Service  
Fig. 713 For Air, Gas or Steam Service

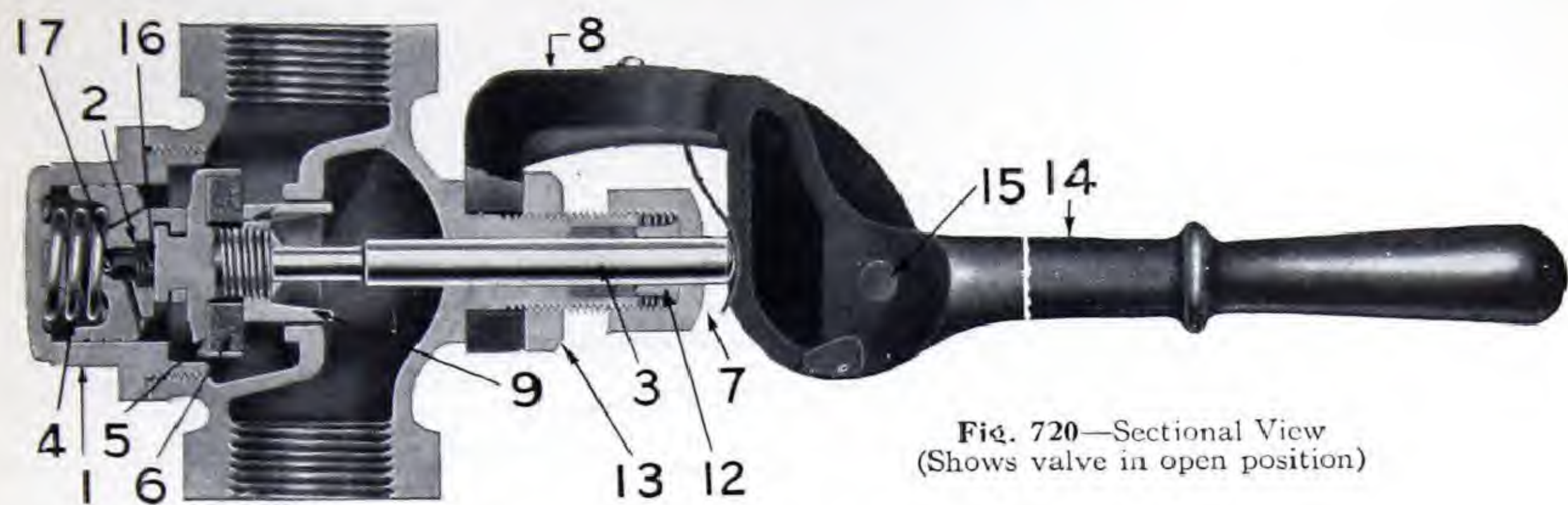


Fig. 720—Sectional View  
(Shows valve in open position)

List Prices of Parts, Fig. 720

Part No.	Sizes	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
1-Cap.....		1.25	1.50	1.80	2.30	3.15	5.20	8.25
2-Piston.....		1.45	1.70	1.80	2.05	2.50	3.05	3.80
3-Spindle.....		.25	.40	.45	.50	.55	.60	.65
4-Spring.....		.15	.15	.25	.30	.35	.40	.75
5-Disc holder.....		.55	.70	.75	.85	1.05	1.50	1.90
7-Packing nut.....		.15	.15	.20	.20	.25	.25	.25
8-Yoke.....		1.05	1.15	1.30	1.40	1.60	1.80	2.20
9-Disc nut.....		.10	.20	.25	.30	.45	.65	.85
12-Gland.....		.05	.05	.05	.05	.10	.10	.10
13-Yoke nut.....		.10	.10	.20	.25	.25	.25	.25
14-Lever.....		.55	.70	.80	1.05	1.15	1.25	1.35
15-Lever pin.....		.05	.05	.10	.10	.10	.10	.10
16-Piston screw.....		.05	.05	.05	.05	.05	.05	.05
17-Check ball.....		.05	.05	.05	.05	.05	.05	.05
DHC- Disc holder complete.....		.70	.95	1.05	1.20	1.60	2.30	2.95

For list prices of Disc, part 6, see page 212.  
Parts of Fig. 713 same as 121 on page 41 with exception of the yoke and lever which are listed above.

Dimensions, Inches

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face.....	2 3/4	3 5/16	3 13/16	4 1/4	4 7/8	5 3/4	6 5/8
Length of lever, centre pin to end.....	7 1/2	8 1/8	9 1/4	10 11/16	11 3/8	11 15/16	14 7/16
Approx. lift when open, Fig. 720.....	1/4	9/32	5/16	1 1/32	3/8	5/8	1 1/16
Approx. lift when open, Fig. 713.....	1/4	9/32	5/16	1 1/32	3/8	5/8	1 1/16



# JENKINS BRONZE VALVES

## HY-LO AIR GUN (Patented) With Lever Handle or Push Button

Regularly Fitted with No. 946 Disc for 125 Pounds Air Pressure

For use on compressed air lines for blowing dust, dirt, chips, lint, filings, sand, borings and other matter. It prevents air waste and earns its cost many times in the air it saves at the point of use.

*Jenkins Hy-Lo Air Gun permits regulation of flow.* As the spindle (A) is pressed inward, the volume of air passing through the gun is controlled by the throttling lip until full pressure is attained when the gun is wide open. Closing is automatic and as rapid as may be desired.

Fitted with a specially compounded Jenkins Disc (B) assures perfect tightness almost indefinitely without necessity of regrinding. The disc holder (C) gives full rim protection to the seat face of the disc and is so designed that air cannot leak between the disc and back surface of disc holder. The special steel alloy, cadmium plated spring (D) and air pressure hold the disc to the seat and assist in closing. Although the disc lasts almost indefinitely, it can be easily and quickly renewed at slight expense.

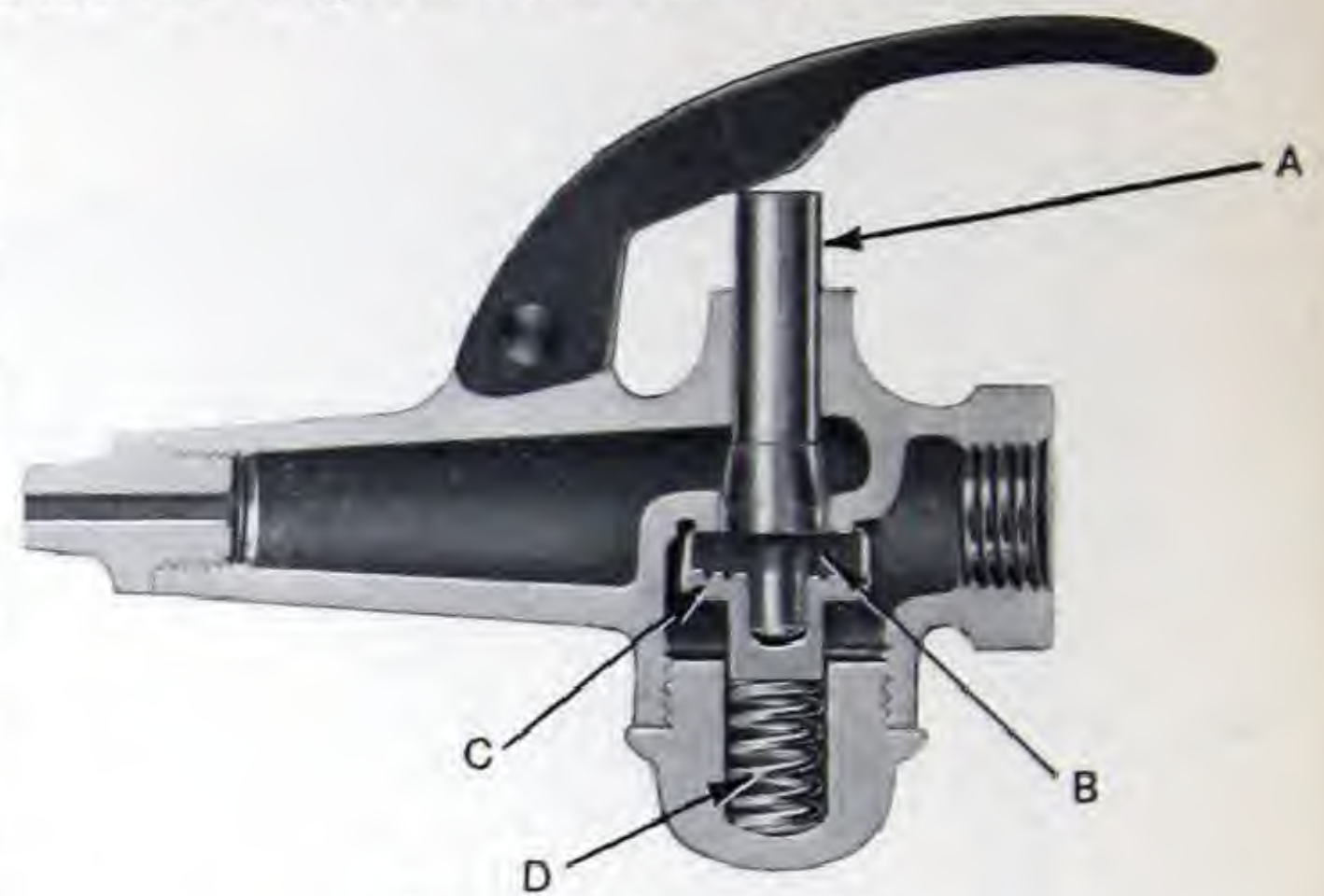


Fig. 610—Sectional View

Each gun is cast of high grade bronze and is carefully machined, assembled, inspected and tested. Regularly fitted with a pointed tip, these guns can be furnished with flat, rounded or extension tip as may be required. The lever of Fig. 610 is malleable iron enamelled green and shaped to fit the palm of the hand for easy operation.



Fig. 610  
Air Gun with Lever Handle  
Code: ABWED



Fig. 609  
Air Gun with Push Button  
Code: ABWEC

### List Prices of Air Guns

Sizes.....	1/8	1/4	3/8
Figs. 610 and 609.....	1.65	1.65	1.90
Figs. 610E and 609E with flat tip B.....	2.15	2.15	2.40
Figs. 610F and 609F with rounded tip C....	1.65	1.65	1.90
Figs. 610G and 609G with extension tip D..	2.40	2.40	2.65
Approximate weight, lbs. and oz. ....	0-8	0-8	0-9

### List Prices of Hose Nipple A

Sizes.....	1/8	1/4	3/8
1/8 inch hose.....	.45	.45	.50
1/4 inch hose.....	.45	.45	.55
3/8 inch hose.....	.50	.50	.60
1/2 inch hose.....	.60	.60	.65
3/4 inch hose.....	.70	.70	.75



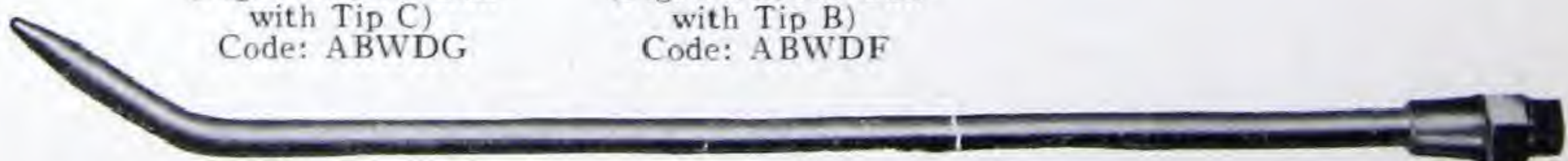
**Rounded Tip C**  
(Fig. 610F, Air Gun  
with Tip C)  
Code: ABWDK  
(Fig. 609F, Air Gun  
with Tip C)  
Code: ABWDG



**Flat Tip B**  
(Fig. 610E, Air Gun  
with Tip B)  
Code: ABWDJ  
(Fig. 609E, Air Gun  
with Tip B)  
Code: ABWDF



**Hose Nipple A**



**Extension Tip D.** (Fig. 610G, Air Gun with Tip D) Code: ABWDL. (Fig. 609G, Air Gun with Tip D) Code: ABWDH



FLUID GUN  
With Lever Handle or Push Button

Regularly Fitted with No. 946 Disc for 125 Pounds Water Pressure

It has numerous uses and is particularly recommended for general cleaning purposes such as: Porcelain vats in breweries, various hospital utensils, dairy equipment, automobiles, in garages, etc. Built along similar lines to the Jenkins Air Gun. In order to prevent leakage at the spindle it is fitted with a hexagon packing nut and packing. The flow in the Fluid Gun is unrestricted.

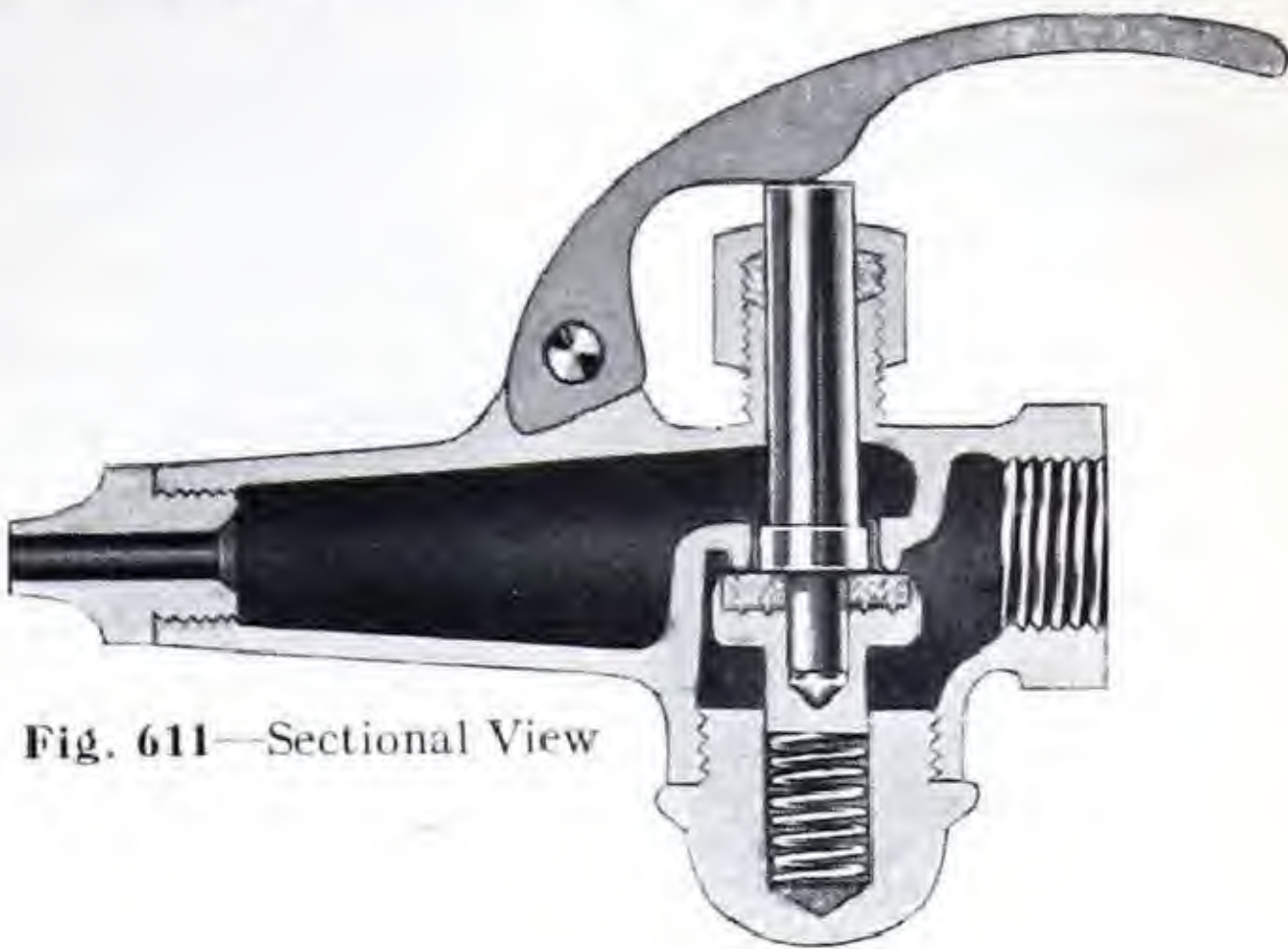


Fig. 611—Sectional View



Fig. 611  
Fluid Gun with Lever  
Handle  
Code: ABWEG

Each gun is cast of high grade bronze and is carefully machined, assembled, inspected and tested. Regularly fitted with a pointed tip, these guns can be furnished with flat, rounded or extension tip as may be required. The lever is malleable iron enamelled green and shaped to fit the palm of the hand for easy operation.

List Prices of Fluid Guns

Sizes . . . . .	1/8	1/4	3/8
Fig. 611 . . . . .	2.15	2.15	2.40
Fig. 611E with flat tip B . . . . .	2.65	2.65	2.90
Fig. 611F with rounded tip C . . . . .	2.15	2.15	2.40
Fig. 611G with extension tip D . . . . .	2.90	2.90	3.15
Approximate weight, lbs. and oz. . . . .	0-8	0-8	0-9

List Prices of Hose Nipple A

Sizes . . . . .	1/8	1/4	3/8
1/8 inch hose . . . . .	.45	.45	.50
1/4 inch hose . . . . .	.45	.45	.55
3/8 inch hose . . . . .	.50	.50	.60
1/2 inch hose . . . . .	.60	.60	.65
3/4 inch hose . . . . .	.70	.70	.75



Rounded Tip C  
(Fig. 611-F, Fluid  
Gun with Tip C)  
(Code: ABWEF)



Flat Tip B  
(Fig. 611-E, Fluid  
Gun with Tip B)  
(Code: ABWEE)



Hose Nipple



Extension Tip D (Fig. 611G Fluid Gun with Tip D) Code: ABWEI



# JENKINS BRONZE VALVES

## QUICK-OPENING GLOBE AND ANGLE Standard Pattern

Regularly Fitted with No. 119 Disc for 150 Pounds Steam Pressure  
Use No. 936 for Water and Gas Working Pressure



**Fig. 941**  
Globe with Lever  
Code: ABXIU

These valves are made from the same patterns as Figs. 106-A and 108-A Standard Bronze Valves with one-piece, screw-over bonnet and slip-on, stay-on disc holder. In these quick-opening valves, the spindles and bonnets are quadruple threaded, permitting them to be opened full with about a quarter the usual number of turns. Lever is of malleable iron, enamelled green.

The weights and dimensions of these valves are the same as those of Figs. 106-A and 108-A listed on pages 16 and 17.



**Fig. 943**  
Angle with Lever  
Code: ABXIW

**Fig. 942**  
Globe with Wheel  
(Not illustrated)  
Code: ABXIV

**Fig. 944**  
Angle with Wheel  
(Not illustrated)  
Code: ABXIX

Sizes .....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Figs. 941 to 944 .....	2.40	2.60	3.00	3.60	4.50	6.20	8.20	12.00	36.00	40.00
Number of turns to open Figs. 941 to 944 .....	7/8	1 1/8	1	1 1/8	1 1/4	1 1/4	1 1/8	1 1/4	1 1/2	1 5/8

Also made in Extra Heavy Pattern  
Prices on Application

## COMBINATION STOP AND CHECK GLOBE AND ANGLE Standard Pattern

Regularly Fitted with No. 936 Disc for 250 Pounds  
Non-Shock Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 01048-123456 and 01049-123456



**Fig. 630**  
Globe, Screwed  
Sectional View  
Code: ABWFM

These valves perform the functions both of a stop and a check valve. The disc holder is not secured to the spindle by a lock-nut or other methods as in a regular globe or angle valve, but is allowed to slide freely on the spindle. With the pressure underneath the disc, the disc holder rises as the spindle is unscrewed, being forced up by the pressure. In case of return flow, the disc holder falls, closing the valve automatically as in a check valve. The amount of lift can be regulated by means of the spindle.

These valves are used extensively on boiler feed lines. Weights and dimensions are the same as those of Figs. 106-A, 107-A, 108-A, 109-A listed on pages 16 and 17.

**Fig. 631**  
Globe, Flanged  
(Not illustrated)  
Code: ABWFO

**Fig. 633**  
Angle, Flanged  
(Not illustrated)  
Code: ABWFT



**Fig. 632**  
Angle, Screwed  
Sectional View  
Code: ABWFR

Prices on Application  
Also made in Extra Heavy Pattern



J E N K I N S   B R O N Z E   V A L V E S

SAFETY, ANGLE AND CROSS  
With Single Weight

Regularly Fitted with No. 110 Disc for 40 to 125 Pounds Steam Working Pressure  
For 40 to 125 Pounds Oil, Water, Gas Working Pressure Use No. 936 Disc



Fig. 126a  
Angle  
Code: ABTYE

Fig. 126  
Cross  
(Not Illustrated)  
Code: ABTYD

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2
Figs. 126a and 126.....	7.30	9.25	11.00	16.50	20.00	29.00
Wgt., lbs. & oz.—Fig. 126 .....	3-1	4-15	8-10	14-4	17-12	27-7
Wgt., lbs. & oz.—Fig. 126a .....	3-0	4-11	7-8	13-13	16-15	26-1

With Balanced Weight

Regularly Fitted with No. 110 Disc for 5 to 30 Pounds Steam Working Pressure  
For 5 to 30 Pounds Oil, Water, Gas Working Pressure Use No. 946 Disc

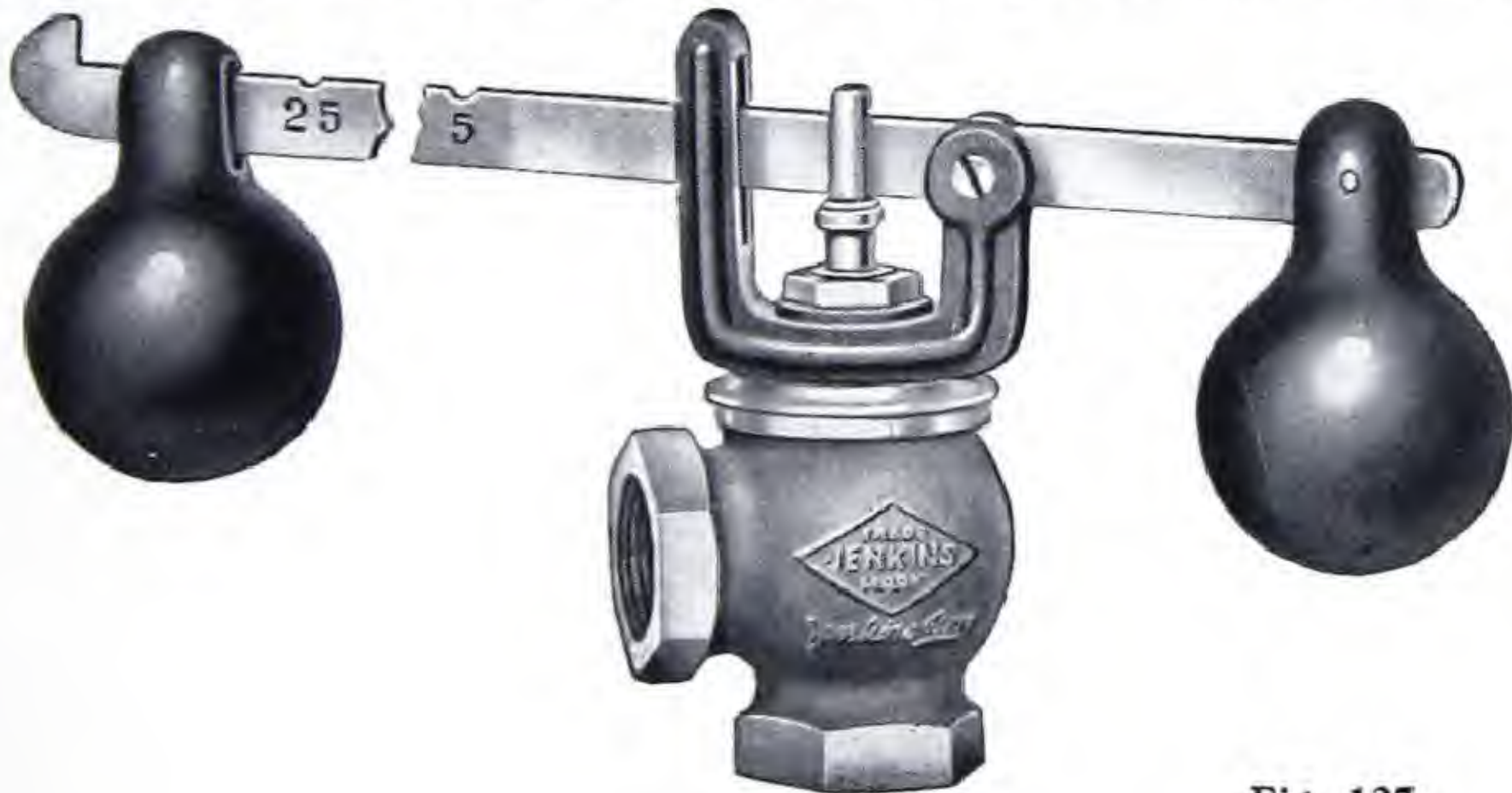


Fig. 127a  
Angle  
Code: ABTYG

Fig. 127  
Cross  
(Not Illustrated)  
Code: ABTYF

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2
Figs. 127a and 127 .....	9.25	11.60	13.50	19.25	23.75	33.00
Wgt., lbs. & ozs.—Fig. 127 .....	3-8	4-9	13-2	21-9	31-12	44-9
Wgt., lbs. & ozs.—Fig. 127a.....	3-7	4-5	12-10	21-2	30-15	43-9

Dimensions, Inches  
Figs. 126a, 126, 127a and 127

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2
Centre to face, inlet and outlet, angle.....	1 3/8	1 9/16	1 13/16	2 1/16	2 1/4	2 7/8
Centre to face, inlet and outlet, cross.....	1 3/8	1 21/32	1 23/32	2 1/8	2 3/8	2 7/8
Centre to top of yoke.....	4 1/8	4 5/8	4 7/8	5 1/8	5 7/16	6 9/16
Centre line of valve to end of lever, Fig. 126 and Fig. 126a.....	14 5/8	18 1/8	24 5/8	26 3/8	28 1/2	32
Centre line of valve to end of lever, Fig. 127 and Fig. 127a.....	9 7/8	11 7/8	12 1/2	13 1/4	14 1/4	18 1/8



# JENKINS BRONZE VALVES

## HORIZONTAL AND ANGLE CHECKS

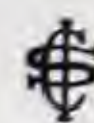
### Standard Pattern—New Style

Regularly Fitted with No 936 Disc for 250 Pounds Non-Shock Oil, Water, Gas  
Working Pressure

For 150 Pounds Steam Working Pressure Use No. 119 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 01050-123456 and 01051-123456



**Fig. 117-A**  
Horizontal, Screwed  
Code: ABTVO



**Fig. 118-A**  
Angle, Screwed  
Code: ABTWB

These Standard Pattern Check Valves conform to the same high standards of material, design and construction as Fig. 106-A, Jenkins Standard Bronze Globe, Angle and Cross Valves listed on page 16. The one-piece screw-over cap is sturdily made. The generous hex faces allow full and easy purchase for a wrench. The cap can be removed and replaced repeatedly without danger of becoming distorted.

The trimmings of the horizontal checks are interchangeable, part for part, size for size, with those of the angle pattern, screwed or flanged.



**Fig. 316-A**  
Horizontal, Flanged  
Code: ABUZA



**Fig. 317-A**  
Angle, Flanged  
Code: ABUZE

Sizes.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 117-A.....	1.10	1.10	1.20	1.30	1.90	2.60	3.60	5.00	7.50	14.00	21.00
Wgt., lbs. and ozs. ....	0-6	0-9	0-13	1-1	1-10	2-8	3-11	5-3	8-13	14-3	22-14
Fig. 118-A.....	1.10	1.10	1.20	1.30	1.90	2.60	3.60	5.00	7.50	14.00	21.00
Wgt., lbs. and ozs. ....	0-6	0-9	0-12	1-0	1-8	2-5	3-7	4-14	8-4	13-12	22-1
Fig. 316-A.....				4.00	5.00	6.00	8.00	10.00	15.00	23.00	32.00
Wgt., lbs. and ozs. ....				2-10	4-2	5-8	7-3	9-4	15-12	24-0	35-0
Fig. 317-A.....				4.00	5.00	6.00	8.00	10.00	15.00	23.00	32.00
Wgt., lbs. and ozs. ....				2-10	4-2	5-8	7-3	9-4	15-4	23-12	33-8

#### List Prices of Parts (See Illustrations on Page opposite)

Part No.	Sizes.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1-Cap.....		.40	.50	.50	.50	.70	1.00	1.20	1.60	2.30	4.00	5.30
2-Disc holder.....		.15	.30	.30	.30	.40	.50	.60	.80	1.00	2.35	3.90
3-Disc guide nut.....		.05	.06	.06	.10	.20	.20	.35	.45	.50	.55	1.10

For list prices of Disc, part 6, see page 212.



J E N K I N S   B R O N Z E   V A L V E S

HORIZONTAL AND ANGLE CHECKS  
Standard Pattern—New Style

Regularly Fitted with No. 936 Disc for 250 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pressure use No. 119 Disc

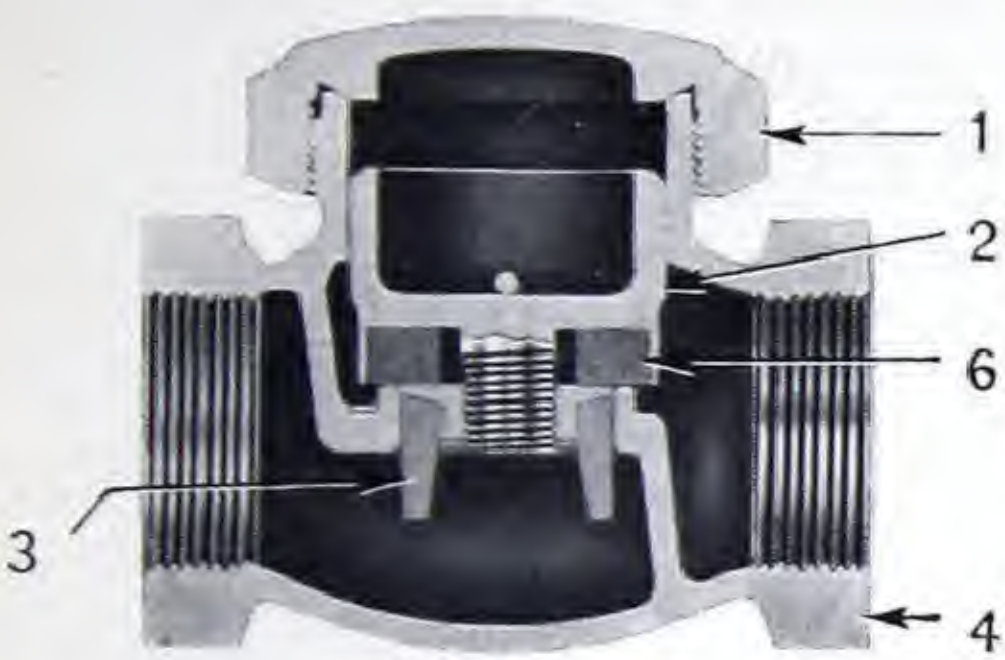


Fig. 117-A  
Sectional View

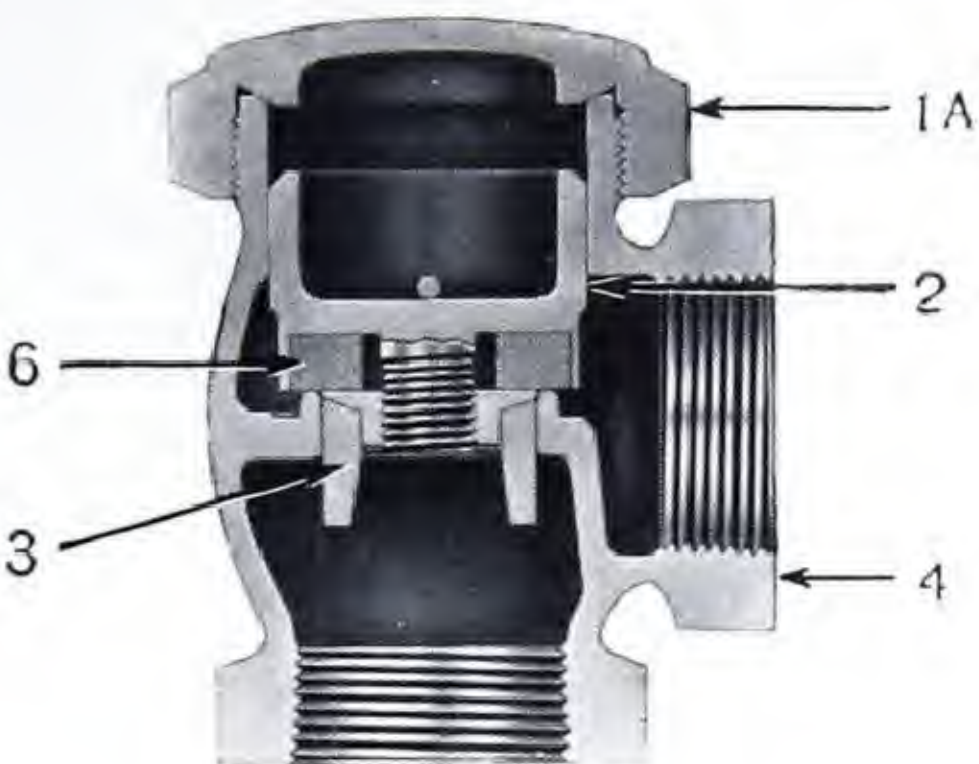


Fig. 118-A  
Sectional View

Description of Parts

Horizontal Pattern

- 1. Cap
- 2. Disc Holder
- 3. Disc Guide Nut
- 4. Body
- 6. Composition Disc

Angle Pattern

- 1A. Cap
- 2. Disc Holder
- 3. Disc Guide Nut
- 4. Body
- 6. Composition Disc

Dimensions, Inches

Sizes.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Horizontal, face to face, screwed.....	1 9/16	2 1/8	2 3/8	2 5/8	3 3/16	3 3/4	4 1/4	4 3/4	5 3/4	6 5/8	8
Horizontal, face to face, flanged.....		3 3/8	3 3/8	4	4 3/4	5 3/8	5 7/8	6 1/2	7 1/2	8 1/2	9 7/8
Angle, centre to face, screwed.....	2 5/32	1 1/16	1 3/16	1 1/4	1 1/2	1 3/4	2	2 1/4	2 3/4	3 1/4	3 3/4
Angle, centre to face, flanged.....				2 3/8	2 7/8	3	3 1/4	3 3/4	4 1/4	4 3/4	5 1/8
Diameter of flanges.....		2 1/2	2 1/2	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges.....		9/32	9/32	5/16	11/32	3/8	13/32	7/16	1/2	9/16	5/8
Horizontal, centre to top of cap.....	1 5/16	1 1/4	1 7/16	1 5/8	1 7/8	2 1/8	2 7/16	2 11/16	3 1/4	3 15/16	4 5/8
Angle, centre to top of cap.....	1 5/16	1 3/16	1 3/8	1 9/16	1 3/4	2	2 5/16	2 9/16	3 1/8	3 13/16	4 5/16



# JENKINS BRONZE VALVES

## HORIZONTAL, ANGLE AND VERTICAL CHECK Standard Pattern—Old Style

Regularly Fitted with No. 936 Disc for 250 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pres-  
sure use No. 119 Disc

Conforming to Canadian Interprovincial  
Specifications Registration Numbers  
0245-123456 and 0246-123456

These Jenkins Standard Bronze Check Valves conform in style and pattern to Jenkins Standard Bronze Valves listed on page 18. The vertical check valve also is made with flanged ends, but is not illustrated. It is designated as Fig. 120b, Code: ABTWK.



Fig. 117  
Horizontal, Screwed  
Code: ABTVI



Fig. 120  
Horizontal, Flanged  
Code: ABTWD



Fig. 118  
Angle, Screwed  
Code: ABTVY



Fig. 120a  
Angle, Flanged  
Code: ABTWG



Fig. 119  
Vertical, Screwed  
Code: ABTWC

Sizes.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 117.....	1.10	1.10	1.20	1.30	1.90	2.60	3.60	5.00	7.50	14.00	21.00
Wgt., lbs. and ozs.....	0-4	0-9	0-11	1-1	1-12	2-8	3-7	5-1	8-14	13-15	22-13
Fig. 118.....	1.10	1.10	1.20	1.30	1.90	2.60	3.60	5.00	7.50	14.00	21.00
Wgt., lbs. and ozs.....	0-3	0-8	0-11	0-15	1-9	2-3	3-3	4-12	8-4	12-12	20-2
Fig. 119.....	1.10	1.10	1.20	1.30	1.90	2.60	3.60	5.00	7.50	14.00	21.00
Wgt., lbs. and ozs.....	0-3	0-7	0-10	0-13	1-6	2-0	2-15	4-7	6-13	11-7	19-15
Fig. 120.....	...	...	...	4.00	5.00	6.00	8.00	10.00	15.00	23.00	32.00
Wgt., lbs. and ozs.....	...	...	...	2-6	3-6	5-1	7-2	9-12	15-11	24-12	31-8
Fig. 120a.....	...	...	...	4.00	5.00	6.00	8.00	10.00	15.00	23.00	32.00
Wgt., lbs. and ozs.....	...	...	...	2-8	3-9	5-7	7-8	9-14	16-10	20-0	32-0
Fig. 120b.....	...	...	...	4.00	5.00	6.00	8.00	10.00	15.00	23.00	32.00
Wgt., lbs. and ozs.....	...	...	...	2-6	3-3	5-2	6-9	9-10	12-15	23-4	31-9

### List Prices of Parts (See Illustrations on Page Opposite)

Part No.	Sizes.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1.	Cap, Fig. 117...	.40	.50	.50	.50	.70	1.00	1.20	1.60	2.30	4.00	5.30
1A.	Cap, Fig. 118...	.40	.50	.50	.50	.70	1.00	1.20	1.60	2.30	4.00	5.30
2.	Disc Holder....	.15	.30	.30	.30	.40	.50	.60	.80	1.00	2.35	3.90
3.	Disc Nut.....	...	.06	.06	.10	.20	.20	.35	.45	.50	.55	1.10
5.	Hub, Fig. 119...	.40	.50	.50	.50	.70	1.00	1.20	1.60	2.30	4.00	5.30

For list prices of Disc, part 6, see page 212.



J E N K I N S   B R O N Z E   V A L V E S

HORIZONTAL, ANGLE AND VERTICAL CHECK  
Standard Pattern—Old Style

Regularly Fitted with No. 936 Disc for 250 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pressure use No. 119 Disc

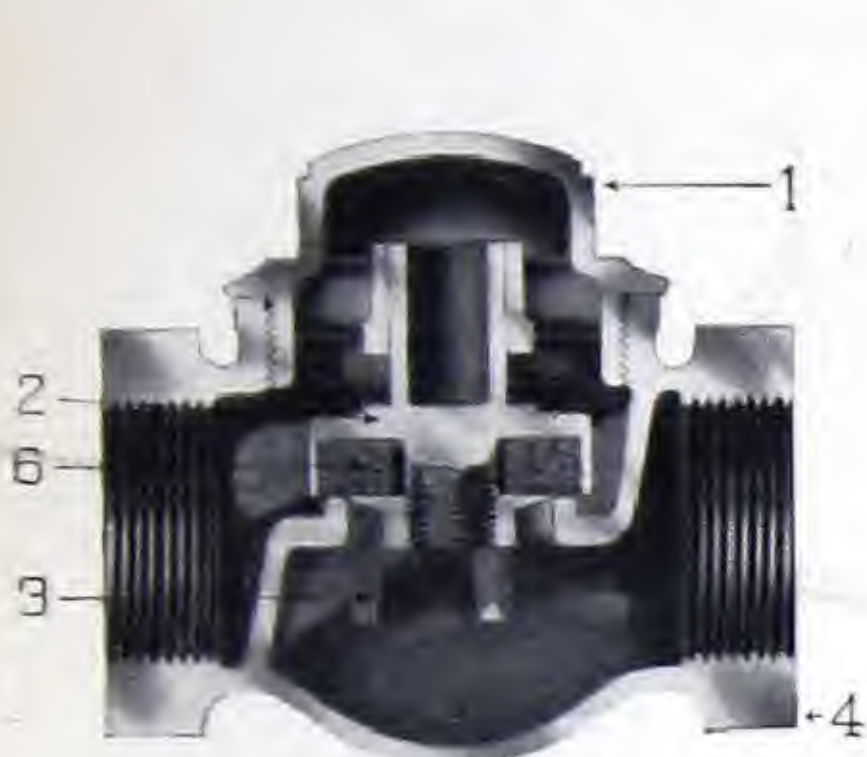


Fig. 117  
Sectional View

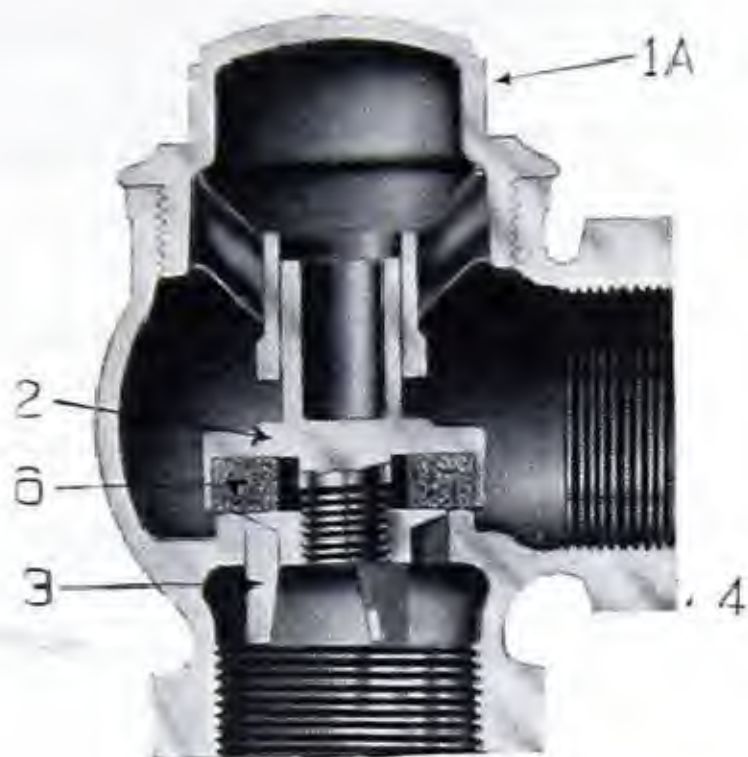


Fig. 118  
Sectional View

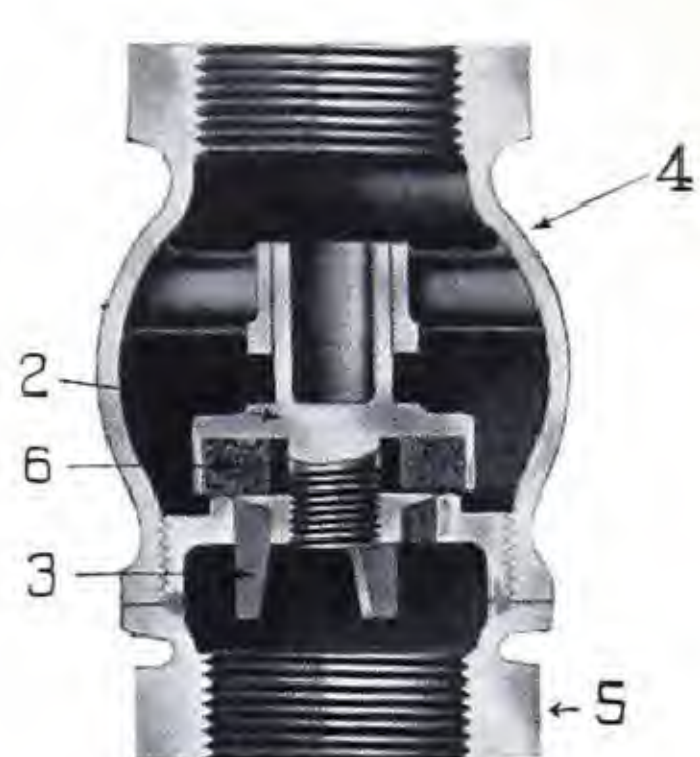


Fig. 119  
Sectional View

Description of Parts

Horizontal Pattern

- 1. Cap.
- 2. Disc Holder.
- 3. Disc Nut.
- 4. Body.
- 6. Composition Disc.

Angle Pattern

- 1a. Cap.
- 2. Disc Holder.
- 3. Disc Nut.
- 4. Body.
- 6. Composition Disc.

Vertical Pattern

- 2. Disc Holder.
- 3. Disc Nut.
- 4. Body
- 5. Hub.
- 6. Composition Disc.

Dimensions, Inches

Sizes.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Horizontal, face to face, screwed.....	1 9/16	2 1/8	2 3/8	2 3/4	3 5/16	3 13/16	4 1/4	4 7/8	5 3/4	6 5/8	8 1/2
Horizontal, face to face, flanged.....	...	2 1/2	3	3 1/16	3 5/8	4	4 3/8	4 7/8	6	6 3/4	7 1/2
Angle, centre to face, screwed.....	2 5/32	1 1/16	1 3/16	1 3/8	1 1/2	1 3/4	2 1/16	2 1/4	2 7/8	3 1/4	4 1/4
Angle, centre to face, flanged.....	...	1 15/16	2 1/16	2 1/16	2 3/8	2 5/8	2 15/16	3 3/16	3 3/4	4 1/4	4 9/16
Diameter of flanges.....	...	2 1/2	2 1/2	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges.....	...	9/32	9/32	5/16	1 1/32	3/8	13/32	7/16	1/2	9/16	5/8
Horizontal, centre to top of cap, screwed.....	1 1/8	1 7/16	1 1/2	1 3/4	2 1/16	2 1/4	2 1/2	2 7/8	3 7/16	3 15/16	4 5/8
Horizontal, centre to top of cap, flanged.....	...	1 7/16	1 7/8	2 3/16	2 9/16	2 13/16	3 1/4	3 5/8	4 3/8	5	5 13/16
Angle, centre top of cap....	1 3/32	1 1/4	1 1/2	1 3/4	2 1/16	2 1/4	2 9/16	2 15/16	3 7/16	3 13/16	4 11/16
Vertical, face to face, screwed.....	1 13/16	2 3/8	2 9/16	3 3/16	3 9/16	4 1/8	4 1/2	5 1/4	5 13/16	7 3/8	9 1/16
Vertical, face to face, flanged.....	...	2 7/8	3 1/16	3 7/16	3 13/16	4 3/8	4 13/16	5 1/2	6 1/4	7 3/8	9 1/16



# JENKINS BRONZE VALVES

## STREAMLINE HORIZONTAL CHECKS For Streamline Copper Pipe

Manufactured under License by Canada Wire and Cable Company.

Regularly Fitted with No. 936 Disc for 250 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pressure use No. 119 Disc



Fig. 117A-S  
Horizontal  
Code: ABTVOS

These Valves are exactly the same pattern as Jenkins Standard Bronze Horizontal Check Valves excepting that the pipe ends are for use on Streamline Copper pipe and fittings. When the solder is fed through the hole, the law of capillary attraction distributes it over the entire surface between the valve and pipe. When the solder appears around the end of the valve, all that is necessary is to put a drop of solder in the hole, making a perfect, leak-proof, vibration-proof joint.

Sizes .....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 117A-S .....	1.10	1.20	1.30	1.90	2.60	3.60	5.00	7.50	14.00	21.00
Wgt., lbs. and oz. ....	0-9	0-11	1-1	1-12	2-8	3-7	5-1	8-14	13-15	22-13

### Dimensions, Inches

Sizes .....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
End to end .....	$2\frac{3}{4}$	$3\frac{1}{8}$	$3\frac{1}{2}$	$4\frac{1}{4}$	$4\frac{3}{4}$	$5\frac{1}{4}$	$5\frac{7}{8}$	7	$8\frac{3}{8}$	$9\frac{7}{8}$
Depth of port .....	$\frac{3}{16}$	$\frac{11}{16}$	$\frac{13}{16}$	1	$1\frac{1}{16}$	$1\frac{1}{8}$	$1\frac{3}{16}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$
Centre to top of cap. ....	$1\frac{1}{4}$	$1\frac{3}{16}$	$1\frac{5}{8}$	$1\frac{7}{8}$	$2\frac{1}{8}$	$2\frac{1}{16}$	$2\frac{11}{16}$	$3\frac{1}{4}$	$3\frac{15}{16}$	$4\frac{5}{8}$

List price of parts same as Fig. 117-A listed on page 50.



J E N K I N S   B R O N Z E   V A L V E S

SWING CHECK  
Standard Pattern

Regularly Fitted with No. 936 Disc for 250 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pressure Use 119 Disc

Conforming to Canadian Interprovincial Specifications  
Registration Number 0216-123456



Fig. 475  
Swing Check,  
Screwed  
Code: ABVRK

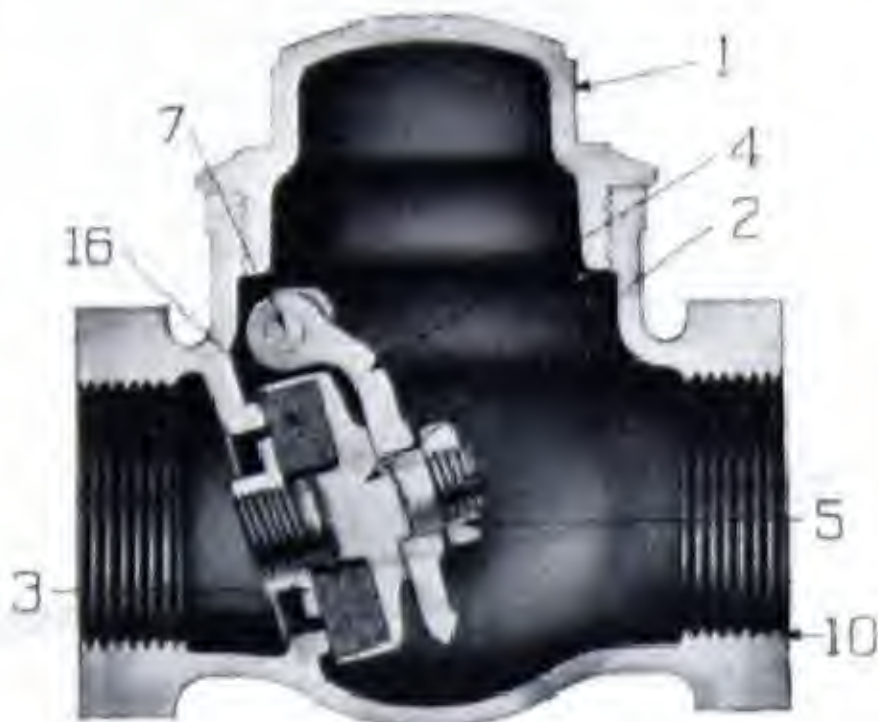


Fig. 475  
Sectional View



Fig. 476  
Swing Check,  
Flanged  
Code: ABVRM

Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 475	1.75	1.75	1.90	2.75	3.75	5.20	7.20	10.75	20.25	30.25
Wgt., lbs. and ozs.	0-9	0-10	0-15	1-11	2-5	3-8	5-3	8-2	13-4	21-6
Fig. 476			5.75	7.20	8.65	11.50	14.50	21.50	33.00	46.00
Wgt., lbs. and ozs.			2-9	3-11	5-1	6-15	9-13	14-3	20-15	30-13

Dimensions, Inches

Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed	2 1/4	2 7/16	2 3/4	3 5/16	3 13/16	4 1/4	4 7/8	5 3/4	6 5/8	8 1/2
Face to face, flanged	2 1/2	2 1/2	3 1/16	3 5/8	4	4 3/8	4 7/8	6	6 3/4	7 1/2
Diameter of flanges	2 1/2	2 1/2	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges	9/32	9/32	5/16	11/32	3/8	13/32	7/16	1/2	9/16	5/8
Centre to top of cap	1 3/4	1 3/4	2	2 3/8	2 11/16	3	3 7/16	4 1/8	4 11/16	5 3/8

List Prices of Parts

Part No. . . . . Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Cap	.40	.40	.40	.55	.80	1.00	1.45	2.00	3.70	5.15
2. Disc Holder	.20	.20	.20	.30	.40	.50	.60	1.00	2.50	3.30
3. Disc Plate	.05	.05	.05	.10	.10	.10	.15	.20		
4. Hanger	.20	.20	.20	.25	.35	.40	.50	.60	1.45	1.70
5. Hanger Nut	.05	.05	.05	.05	.05	.10	.10	.10	.20	.20
6. Side Plugs (pair)	.10	.10	.10	.10	.10	.15	.15	.20	.45	.55
7. Pin	.05	.05	.05	.05	.05	.05	.10	.10	.15	.15
14. Disc Plate Nut (Not illustrated)									.20	.20
15. Disc Plate									.35	.60

For list prices of Disc, part 16, see page 212. Sizes 2 1/2" and 3" have parts 14 and 15 instead of part 3.



# J E N K I N S   B R O N Z E   V A L V E S

## SWING CHECK

**Extra Heavy Pattern**

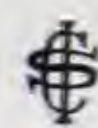
**Renewable Composition Disc**

Regularly Fitted With No. 936 Disc For 450 Pounds Non-Shock Oil, Water, Gas  
Working Pressure

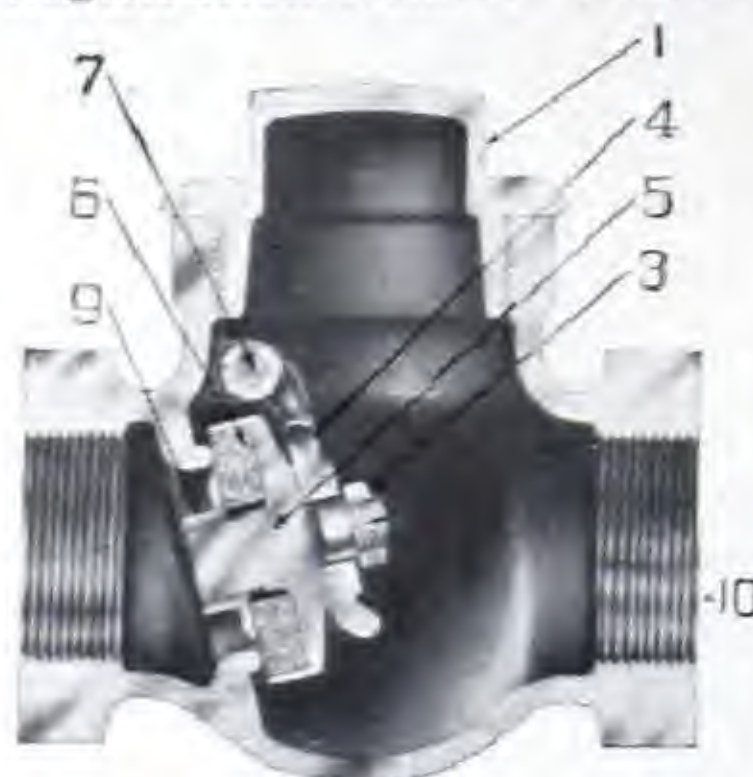
For 300 Pounds Steam Working Pressure Use No. 1120 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Number 053-123456



**Fig. 260**  
Swing Check, Screwed  
Code: ABUPU



**Fig. 260**  
Sectional View



**Fig. 262**  
Swing Check, Flanged  
Code: ABURG

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 260.....	4.50	5.00	6.50	8.00	11.50	17.00	30.00	44.00
Wgt., lbs. & ozs.....	1-8	2-4	3-9	5-0	7-4	12-8	20-12	33-12
Fig. 262.....	7.50	9.50	12.50	15.00	21.00	29.00	45.00	60.00
Wgt., lbs. & ozs.....	4-0	6-8	8-12	11-8	16-8	24-0	37-0	54-0

### Dimensions, Inches

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed.....	2 15/16	3 1/2	4 1/8	4 5/8	5 3/8	6 1/4	7 1/2	8 3/4
Face to face, flanged.....	3 3/4	4 1/4	4 3/4	5 1/2	6 1/4	7 1/4	8 1/4	9 1/2
Diameter of flanges.....	3 3/4	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4
Thickness of flanges.....	13/32	7/16	1/2	17/32	9/16	5/8	11/16	3/4
Centre to top of cap.....	2 3/8	2 3/4	3 1/16	3 1/4	3 3/4	4 3/8	5	5 3/4

### List Prices of Parts

Part No.....	Sizes	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Cap or Hub.....		.95	1.10	1.30	1.55	2.20	3.35	6.60	8.35
2. Side Plugs (pair).....		.15	.15	.15	.20	.20	.30	.30	.70
3. Hanger Nut.....		.05	.05	.05	.05	.05	.20	.20	.20
4. Hanger.....		.50	.55	.60	.70	.70	.95	1.80	1.80
5. Disc Holder.....		.55	.65	.70	.85	1.05	1.40	2.40	3.35
7. Hanger Pin.....		.05	.05	.05	.10	.10	.10	.20	.25
9. Disc Nut.....		.05	.10	.10	.10	.15	.20	.55	.65

For price of Disc, part 6, see page 212. In sizes 2 1/2" and 3", part 9 is in two parts, Disc Nut and Disc Plate.



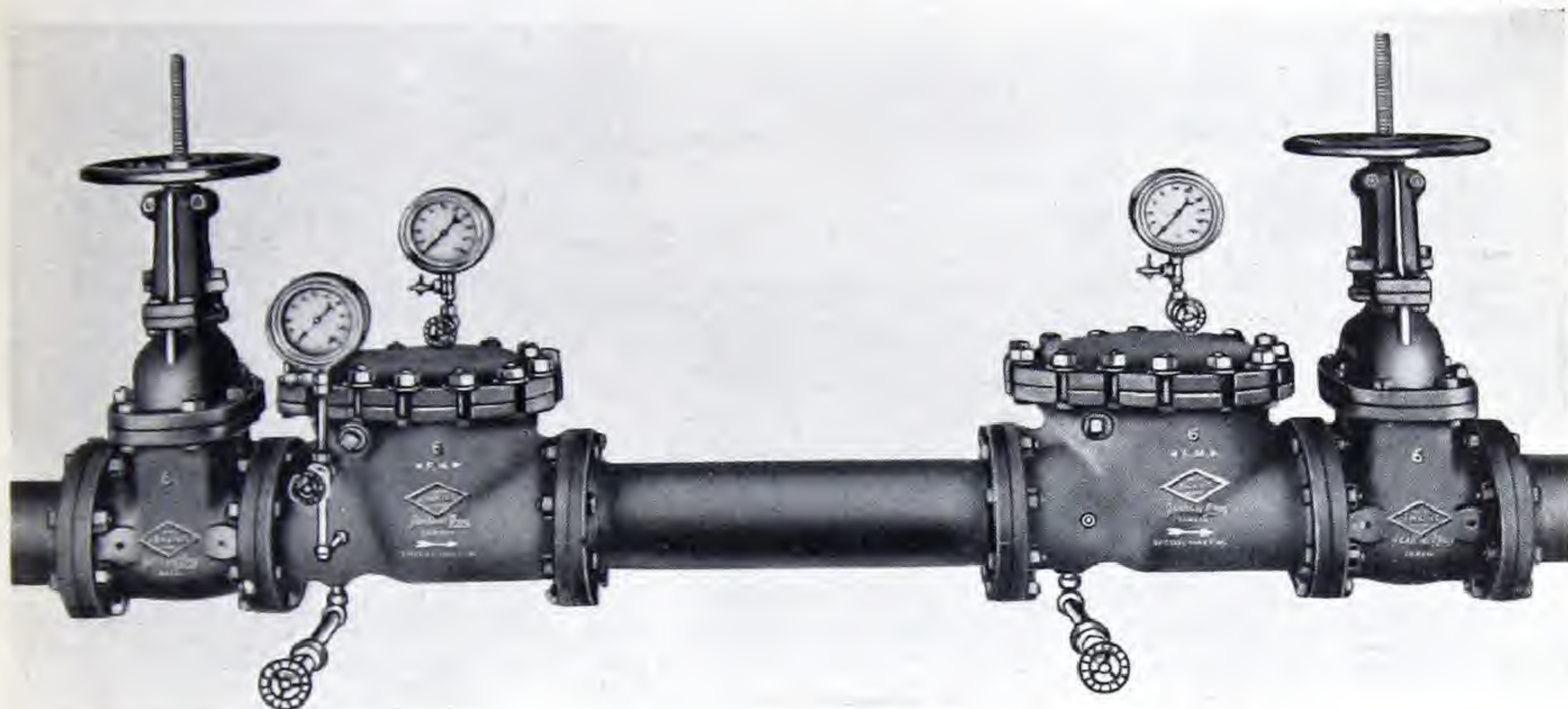
# JENKINS BRONZE VALVES

## SPECIAL ALL BRONZE SWING CHECK VALVES

Bronze Seat Ring

Jenkins Disc

Fitted with Jenkins Rubber Composition Disc for 150 Pounds  
Water Working Pressure



*Double Check Valve equipment with spacer, incorporating two Fig. 481 Jenkins "FM" Special ALL-Bronze Check Valves, including bronze trimmings consisting of gauges, valves for testing and draining, cocks, fittings and nipples and two Fig. 825 Jenkins Underwriters' Pattern Iron Body Gate Valves.*

**Fig. 481**  
Swing Check, Flanged  
Code: ABVRY

Jenkins All-Bronze Special Type F.M. Swing Check Valves are made in sizes 4", 6", 8" and 10", in accordance with the specifications of the Associated Factory Mutual Fire Insurance Companies for Sprinkler Systems. In addition, Jenkins manufacture special All-Bronze Check Valves F.M., sizes 2" and 3" for use when approved by Provincial Boards of Health on auxiliary supplies, etc., or in Laundries, Dye Houses, Pulp and Paper Mills and other establishments using water softeners or other equipment.

The usual method of installation is as illustrated and consists of two Jenkins Special All-Bronze Swing Check Valves, Bronze Globe and Angle Valves, Gauges, Test Cocks, etc., and two Jenkins Underwriters' Approved Iron Body Gate Valves.

This installation should be made where the valves will be readily accessible for examination and test. The tightness of each Check Valve can be verified in a few moments. When designing these valves, consideration was given to the frequent examination to which they are subjected. To simplify the inspection, the bonnet is slotted for bolts, which permits quick and easy removal. It is not necessary to remove the clapper; the design allows it to be swung entirely out of the body without withdrawing the hanger pin, in which position it can be readily examined.

These valves may be bolted together, thus providing a space between discs of 9 inches on 2" size, 10 $\frac{3}{4}$  inches on 3" size, 13 inches on 4" size, 18 inches on 6" size, 20 inches on 8" size and 23 inches on 10" size, which is sufficient to prevent any ordinary material found in a pipe from holding both discs open at the same time. To still further improve the efficiency, a piece of pipe or spacer, from 3 to 5 feet long, installed between the checks, is recommended. With this arrangement, even a piece of rope or a stick would not be likely to extend from one check to the other.

**Prices Fig. 481 on Application**  
**For Iron Body pattern, see page 144.**



# JENKINS BRONZE VALVES

## FOOT VALVE (Patented) For Gasoline Service Station Pumps

JENKINS FOOT VALVES are absolutely drop-tight. They are a special type of check valve for installation inside the tank at end of suction pipe. They will remain tight from the moment they are put into service. Neither climatic variations, gasoline, or the vibrations of heavy traffic affect these valves. A retail gasoline pump with which a Jenkins Drop-tight gasoline valve is used will show correct delivery.

### Every Jenkins Foot Valve Is Factory Tested

Every Jenkins Foot Valve is made to demonstrate that it is absolutely gasoline drop-tight before it is shipped from the factory. It is tested as follows:

(1) The body and seat of the valve are tested under water by means of air pressure in order to insure that the castings are sound. During this test, the valve must prove bubble-tight.

(2) Next, the valve is given a test of long duration in which it is filled above the seat with high-test gasoline. Here, too, it must prove absolutely gasoline drop-tight.



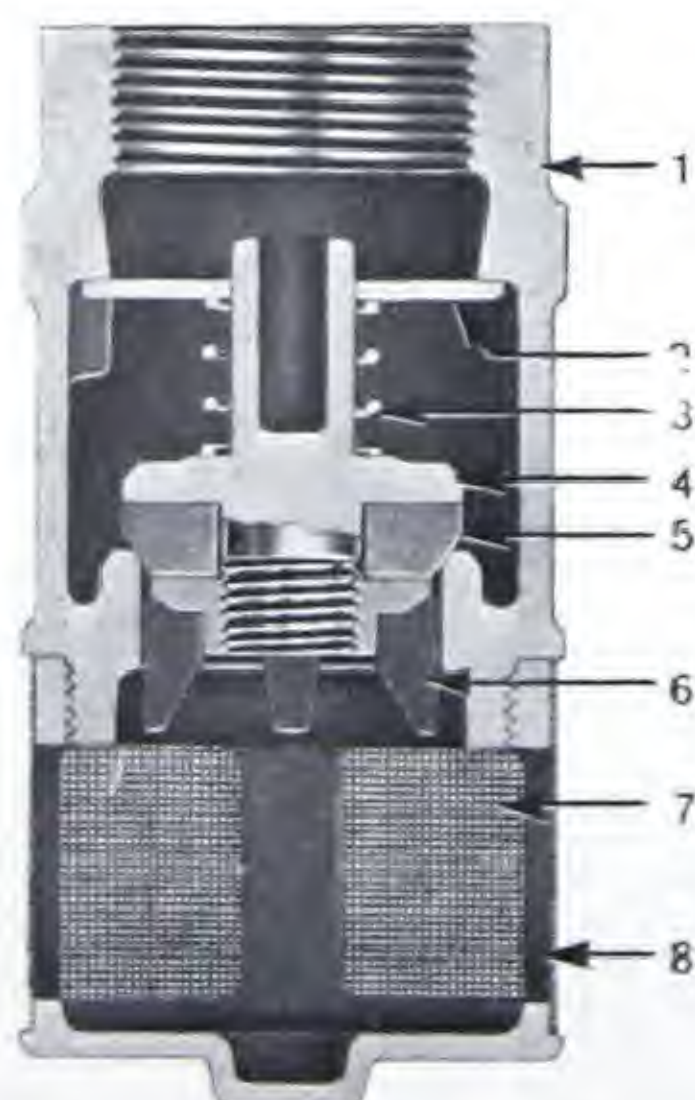
**Fig. 880**  
Bronze Foot Valve  
Code: ABXEH

### List Prices and Weights (Fig. 880)

Sizes.....	1 1/4	1 1/2	2
Fig. 880.....	8.00	9.10	10.20
Wgt., lbs. & oz .....	2-10	3-8	4-10

### Dimensions, Inches (Fig. 880)

Sizes.....	1 1/4	1 1/2	2
Maximum height.....	4 3/4	5 3/8	5 7/16
Maximum diameter...	2 3/8	2 23/32	3 3/16



**Sectional View of Fig. 880**

### Details of Construction

1. BODY—Bronze (Jenkins highest quality bronze). Will not corrode, has strength to resist pipe strains and distortion of seat.
2. FLOATING GUIDE—A feature which assists in proper seating and permits easy removal of the Disc Holder.
3. SPRING—Phosphor bronze. Assists in seating and prevents leaks caused by vibrations.
4. DISC HOLDER—Cast bronze, perfectly machined, true and concentric.
5. DISC—Specially compounded. Unaffected by gasoline. Is scientifically shaped in relation to seat.
6. GUIDE—Carefully fitted to prevent sticking.
7. STRAINER—Fine mesh monel wire cloth riveted on. Cannot slip off.
8. STRAINER CAP—Cast bronze. Screws onto body. Provided with flange on bottom to keep strainer in place.



JENKINS BRONZE VALVES

ANGLE CHECK (Patented)  
For Gasoline Service Station Pumps



Fig. 881  
Iron Body Angle Check  
Code: ABXEJ

Fig. 882  
Bronze Angle Check  
Code: ABXEL

For use on the suction line between tank and service station gasoline pump. They are for installation above the tank.

Jenkins Gasoline Angle Check Valves are made with bronze or iron body, the latter being cadmium-plated. They conform to the same high material and mechanical standards as the Jenkins Foot Valve described on the preceding page, and incorporate the same features which provide drop-tight seating and ability to withstand vibrations even under the most severe conditions of service. As a thoroughly dependable unit, it is offered to those who require this type of valve.

*Every Jenkins Gasoline Angle Check Valve is gasoline drop-tight and is actually tested before being shipped from the factory.*

List Prices and Weights

Sizes.....	1¼	1½	2
Fig. 881.....	8.75	10.40	12.25
Wgt., lbs. & oz.....	3-14	4-9	5-0
Fig. 882.....	11.00	13.00	15.55
Wgt., lbs. & oz.....	4-2	4-15	5-6

Dimensions, Inches

Sizes.....	1¼	1½	2
Centre to inlet face...	2	2 <sup>23</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>8</sub>
Centre to outlet face..	2	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>
Inlet face to top of cap	3 <sup>17</sup> / <sub>32</sub>	4 <sup>31</sup> / <sub>32</sub>	4 <sup>31</sup> / <sub>32</sub>

Details of Construction

- 1. CAP—Bronze, having four lugs on top for easy removal. Perfect threading with body makes tight joint without use of gasket or sealing compound.
- 2. FLOATING GUIDE—A feature that assists in proper seating and permits easy removal of disc holder.
- 3. SPRING—Phosphor bronze. Assists in seating and prevents leaks caused by vibrations.
- 4. DISC HOLDER—Cast bronze, machined perfectly true and concentric.
- 5. DISC—Specially compounded. Unaffected by gasoline. Is scientifically shaped in relation to seat.
- 6. SEAT-RING—Bronze, renewable.
- 7. GUIDE—Carefully fitted to prevent sticking.
- 8. BODY—Fig. 881, iron, cadmium-plated; Fig. 882, bronze. Will not corrode, has strength to resist pipe strains and distortion of seat.

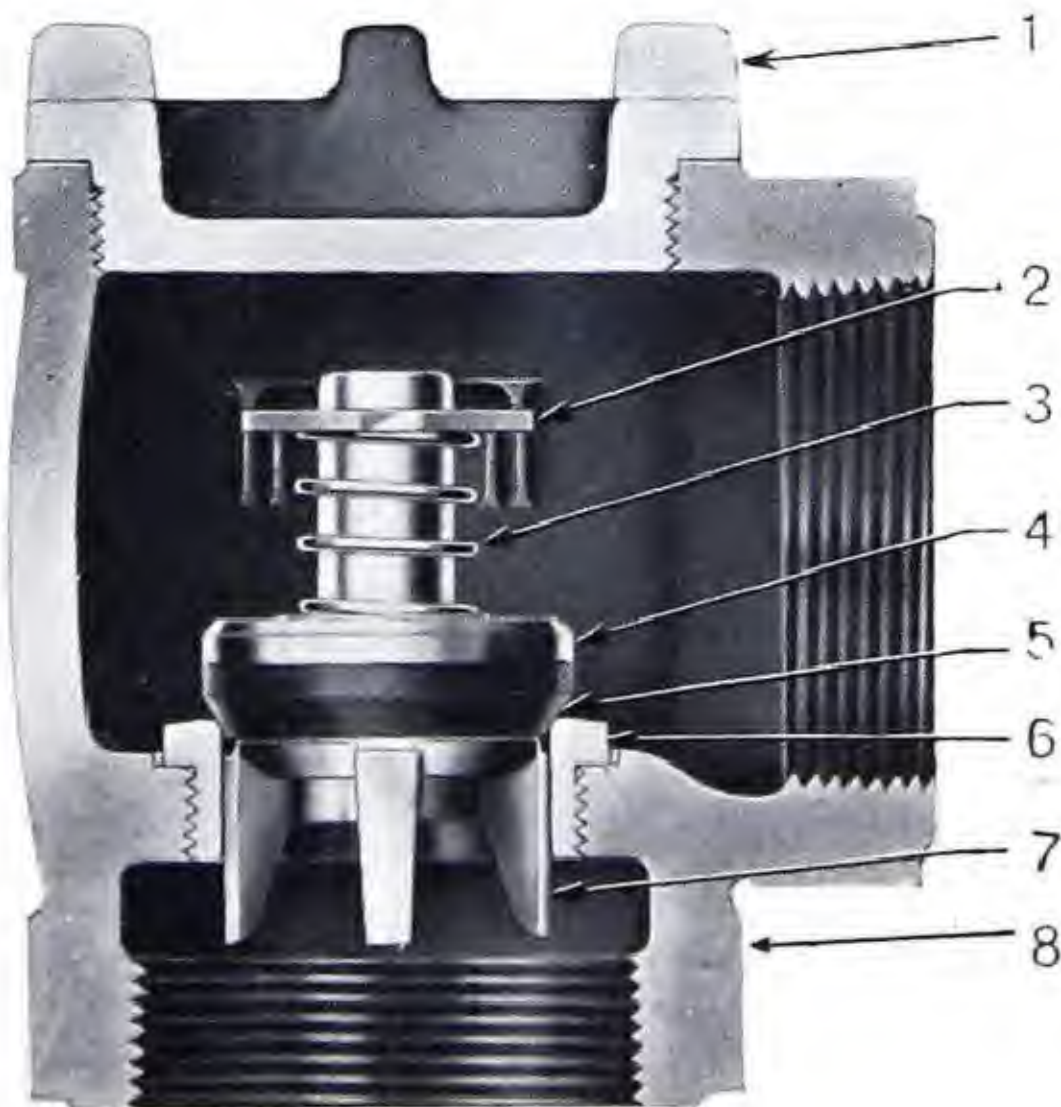


Fig. 881  
Sectional View



# JENKINS BRONZE VALVES

## HORIZONTAL CHECK

For Air Compressor Service

Standard Pattern

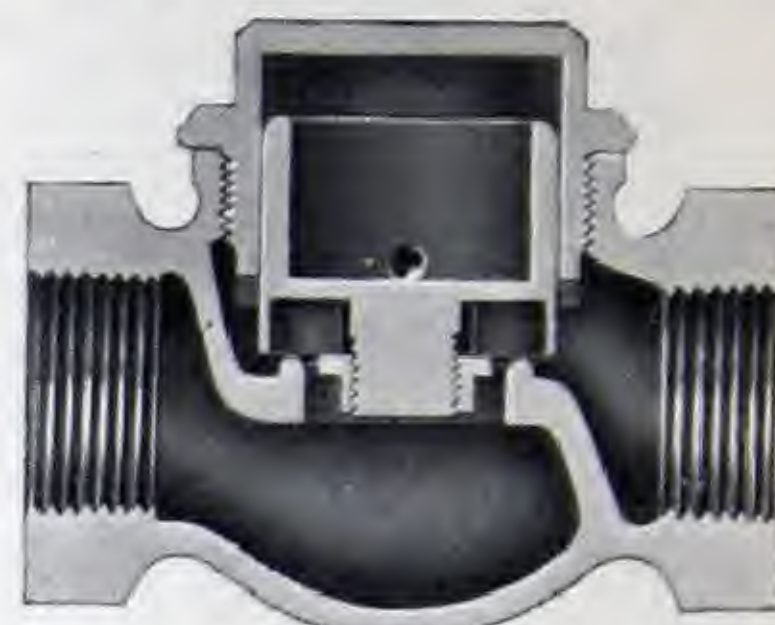
Designed to meet the requirements of severe service up to 250 pounds pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 01027-123456



The Disc Holder, fitted with a Jenkins No. 936 Composition disc, operates in a chamber. Due to the limited lift and the precision machining of parts, these check valves are practically noiseless. The valves are designed that, when so ordered, they can be fitted with a light spring to load the disc holder. For continuous service, this type of valve is unexcelled. This valve can also be supplied with spring loaded metal disc, see page 83.



Sectional View  
Fig. 55-D  
Code: ABTJJ

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 55-D.....	2.40	2.40	2.60	3.00	4.00	5.30	7.50	10.00	18.50	28.00
Wgt., lbs. & oz.....	0-11	1-0	1-6	2-1	3-0	4-0	5-12	9-13	15-0	23-2

### Dimensions, Inches

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed.....	2 1/8	2 3/8	2 3/4	3 5/16	3 13/16	4 1/4	4 7/8	5 3/4	6 5/8	8 1/2
Centre of body to top of cap..	1 3/8	1 3/8	1 9/16	1 13/16	1 15/16	2 1/8	2 7/16	2 15/16	3 3/8	3 13/16

## HORIZONTAL CHECK

With Boss and Drip Cock

Standard Pattern

Regularly Fitted with No. 936 Disc for 250 Pounds Non-Shock Oil, Water, Gas  
Working Pressure

For 150 Pounds Steam Working Pressure use No. 119 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Number 01050-123456

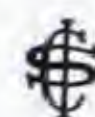


Fig. 657-A  
Horizontal Check  
with Drip Cock  
Code: ABWIC

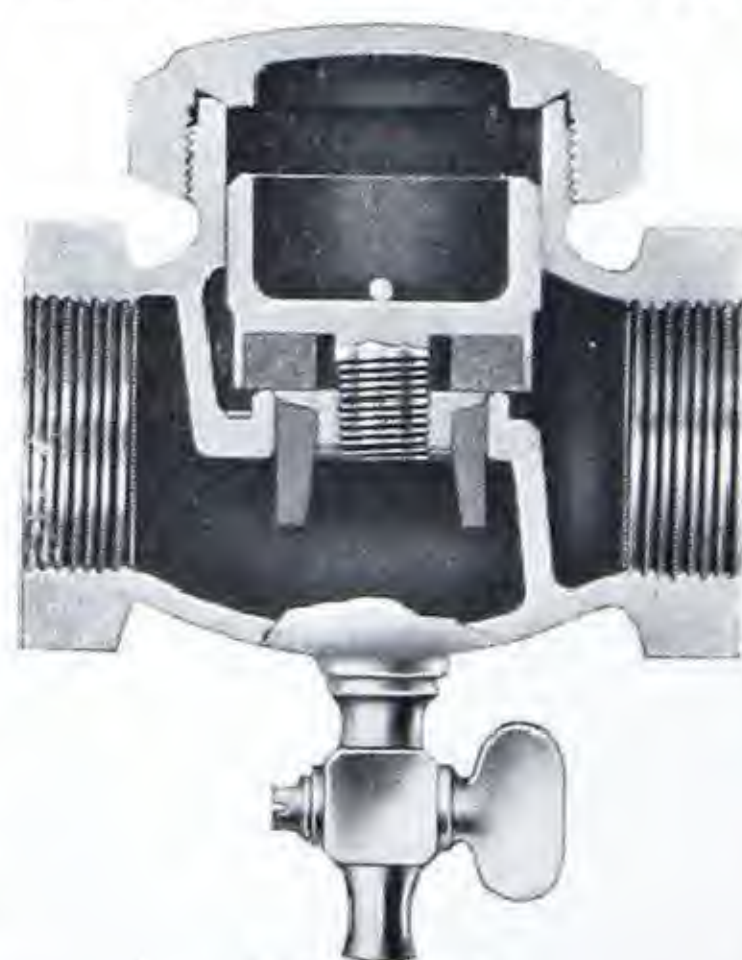


Fig. 657-A  
Sectional View



Fig. 658-A  
Horizontal Check  
with Boss Only  
Code: ABWIG

Sizes.....	1/2	3/4	1	1 1/4
Fig. 657-A.....	2.60	3.30	4.25	5.50
Wgt., lbs. & oz.....	1-4	1-13	2-11	3-14

Sizes.....	1/2	3/4	1	1 1/4
Fig. 658-A.....	2.25	2.90	3.75	5.00
Wgt., lbs. & oz.....	1-2	1-11	2-10	3-13

### Dimensions, Inches

Sizes.....	1/2	3/4	1	1 1/4
Face to face, screwed.....	2 5/8	3 3/16	3 3/4	4 1/4
Centre of body to top of cap..	1 5/8	1 7/8	2 1/8	2 7/16



DIAMOND STEAM TRAP

For Removing Air and Condensation  
From Steam Heating Coils, Steam Jackets, Heaters  
At Pressures to 100 Pounds



Fig. 212  
Sectional View

Description of Parts

- A—Inlet, female connection.
- B—Adjusting Screw
- C—Expansion Plug.
- D—Outlet, female connection.

This trap is especially adapted for use on steam-heating coils, steam jackets, heaters and other places where there is a moderate amount of condensation or air to be removed without waste of steam.

The thermostatic expansion and contraction of the specially compounded hard rubber plug C, shown in the sectional view, is the principle used in the operation of Jenkins Diamond Steam Trap. The trap is entirely automatic, and when properly adjusted, will remain open as long as water escapes. When steam contacts the hard rubber plug, the trap closes instantly.

The parts are interchangeable in each size trap. Additional plug, screws and caps can be supplied promptly.

Directions for Installing

The Jenkins Diamond Steam Trap always should be installed in position as illustrated and connected so that steam enters the inlet end, marked A in sectional view, and discharges at outlet marked D.

To adjust the trap, remove cap, turn out screw. Allow steam to blow through until the trap is thoroughly heated. When the hard rubber plug is fully expanded, turn in screw slowly until plug just touches the seat and stops the flow of steam. Be careful not to screw down hard or tight as the trap cannot function properly in such condition. Replace the cap and the trap is ready for action.

In connecting at the inlet end, attach at least two feet of pipe between the trap and the place to be drained. If trap should leak after long use, remove hard rubber plug and rub the worn end squarely across a piece of sand paper. Replace plug, properly adjust, and the trap is ready for another long period of service.

Capacity

3/8" Trap for approximately 50 sq. ft. radiation and will pass about 15 1/2 lbs. of condensation (or 2 gallons water) per hour.

1/2" Trap for approximately 75 sq. ft. radiation and will pass about 22 1/2 lbs. of condensation (or 3 gallons of water) per hour.

3/4" Trap for approximately 125 sq. ft. radiation and will pass about 37 1/2 lbs. of condensation (or 5 gallons of water) per hour.

These figures are based on steam pressures at 5 lbs. which is ordinarily the maximum used in steam heating system.



Fig. 212  
Diamond Steam Trap  
Female Inlet and Outlet  
Code: ABUJI

Sizes.....	3/8	1/2	3/4
Fig. 212.....	5.50	7.00	8.00
Wgt., lbs. and oz.....	1-0	2-13	4-6
Plug and Screw, only.....	1.20	1.60	2.00
Cap.....	1.25	1.50	1.80

Made also with Iron Body, Fig. 212-A, Code: ABUJL. Prices on application.



# J E N K I N S   B R O N Z E   V A L V E S

## Y OR BLOW-OFF

Standard Pattern—With Renewable Seat Ring

Regularly Fitted with No. 110-H Disc for 250 Pounds Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pressure use No. 119 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Number 0226-123456

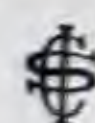


Fig. 124  
Screwed  
Code: ABTYB



Fig. 125  
Flanged  
Code: ABTYC

Sizes.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 124.....	2.00	2.00	3.00	4.00	5.00	6.50	9.25	18.00	25.00
Wgt., lbs. and ozs.....	1-10	1-9	2-6	3-7	4-13	7-2	11-13	19-7	33-1
Fig. 125.....		5.00	7.00	9.00	11.00	13.00	20.00	28.00	37.00
Wgt., lbs. and ozs.....		3-4	4-10	6-6	8-6	12-14	19-6	30-11	45-0

### Dimensions, Inches

Sizes.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Face to face, screwed.....	$3\frac{1}{16}$	$3\frac{1}{16}$	$3\frac{5}{8}$	$4\frac{1}{4}$	$4\frac{3}{4}$	$5\frac{1}{4}$	$6\frac{5}{8}$	$7\frac{13}{16}$	$9\frac{3}{4}$
Face to face, flanged.....		$4\frac{1}{4}$	$4\frac{3}{4}$	$5\frac{1}{4}$	6	$6\frac{1}{2}$	$8\frac{1}{8}$	9	11
Face of inlet flange to rim of hand wheel, valve open.....		$2\frac{1}{8}$	$1\frac{15}{16}$	$2\frac{1}{16}$	$3\frac{1}{8}$	$3\frac{15}{16}$	$4\frac{7}{16}$	$4\frac{7}{8}$	$6\frac{5}{8}$
Face of inlet hexagon to rim of hand wheel, valve open.....	$3\frac{3}{16}$	$3\frac{3}{16}$	$3\frac{1}{4}$	$3\frac{7}{8}$	$4\frac{9}{16}$	$5\frac{7}{16}$	$6\frac{1}{4}$	$6\frac{1}{2}$	$7\frac{7}{8}$
Diameter of flanges.....		$3\frac{1}{2}$	$3\frac{7}{8}$	$4\frac{1}{4}$	$4\frac{5}{8}$	5	6	7	$7\frac{1}{2}$
Thickness of flanges.....		$\frac{5}{16}$	$\frac{11}{32}$	$\frac{3}{8}$	$\frac{13}{32}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$
Centre of body to rim of hand wheel, valve open.....	$5\frac{1}{4}$	$5\frac{1}{4}$	$5\frac{9}{16}$	$6\frac{11}{16}$	$7\frac{11}{16}$	$8\frac{13}{16}$	$10\frac{9}{16}$	$11\frac{7}{8}$	$14\frac{3}{8}$
Diameter of hand wheel.....	$2\frac{7}{16}$	$2\frac{7}{16}$	$2\frac{13}{16}$	3	$3\frac{7}{16}$	$4\frac{1}{8}$	$4\frac{3}{8}$	5	$5\frac{15}{16}$



# JENKINS BRONZE VALVES

## Y OR BLOW-OFF

Standard Pattern—With Renewable Seat Ring

Regularly Fitted with No. 110-H Disc for 250 Pounds Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pressure use No. 119 Disc

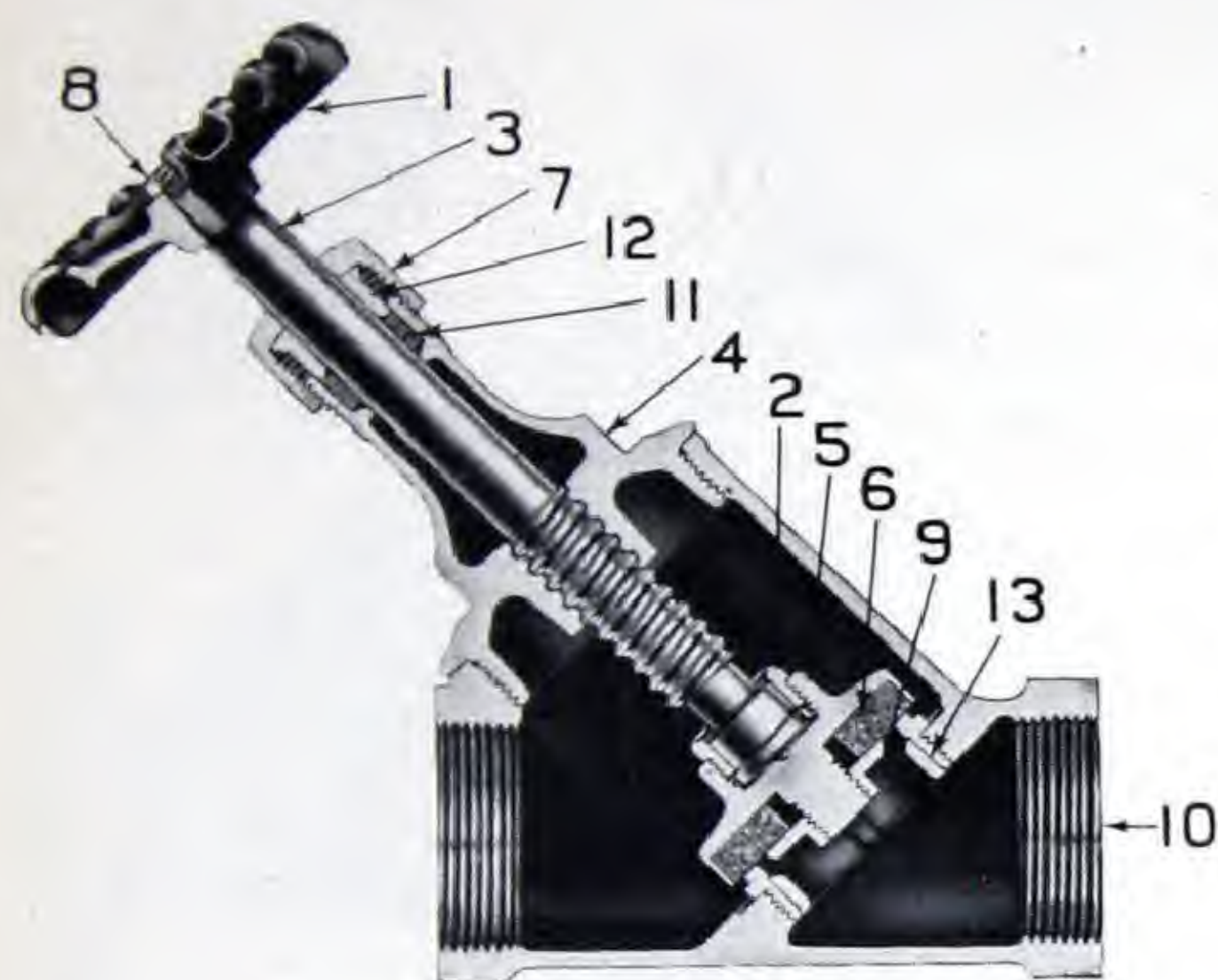


Fig. 124  
Sectional View

These valves allow an opening practically in line with the pipe, and have the additional advantages of the Jenkins Renewable Disc and Renewable Seat Ring which permits easy repair and a tight valve at all times. The spindle is on a 45° angle, which makes the hand wheel easily accessible in close quarters.

### List Prices of Parts

Part No. . . . . Sizes	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel . . . . .	.10	.10	.15	.15	.25	.30	.35	.55	.65
2. Lock Nut . . . . .	.10	.10	.10	.10	.10	.10	.10	.30	.30
3. Spindle . . . . .	.30	.30	.50	.55	.80	.90	1.40	2.60	3.00
4. Bonnet . . . . .	.55	.55	.75	1.20	1.30	1.45	1.85	4.50	6.50
5. Disc Holder . . . . .	.10	.10	.20	.25	.30	.40	.60	1.10	1.50
7. Packing Nut . . . . .	.20	.20	.25	.30	.35	.40	.50	.75	.75
8. Wheel Nut . . . . .	.05	.05	.05	.05	.05	.05	.10	.10	.15
9. Disc Nut . . . . .	.05	.05	.10	.10	.10	.15	.20	.45	.55
11. Packing . . . . .	.05	.05	.05	.06	.06	.06	.06	.10	.10
12. Gland . . . . .	.06	.06	.10	.10	.12	.15	.25	.40	.50
13. Seat Ring . . . . .	.40	.40	.45	.50	.60	.80	.90	1.30	1.50
TC. Trimming complete . . . . .	1.30	1.30	2.00	2.65	3.35	4.30	6.15	12.00	16.65

For list price of Disc, Part 6, see page 212. In sizes 2 1/2" and 3", part 9 is in two parts, Disc Nut and Disc Plate.



# J E N K I N S   B R O N Z E   V A L V E S

## Y OR BLOW-OFF

Extra Heavy Pattern

Renewable Seat Ring

Regularly Fitted with No. 80-A Disc for 400 Pounds Oil, Water,  
Gas Working Pressure

For 250 Pounds Steam Working Pressure use No. 1120 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Number 0227-123456



Fig. 134  
Screwed  
Code: ABTYR



Fig. 135  
Flanged  
Code: ABTVS

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 134.....	7.00	9.50	12.50	16.00	20.00	30.00	56.00	72.00
Wgt., lbs. and ozs.....	2-7	3-9	5-9	8-2	12-0	21-2	31-2	47-10
Fig. 135.....	10.00	12.50	17.00	22.00	28.00	43.50	78.00	94.00
Wgt., lbs. and ozs.....	5-2	8-4	11-4	15-0	21-8	29-12	47-8	68-0

### Dimensions, Inches

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed.....	3 1/2	4 1/4	4 7/8	5 5/8	6 3/4	7 5/8	9 1/4	10 5/8
Face to face, flanged.....	4 5/8	5 1/4	5 3/4	6 1/2	7 3/8	8 3/4	10 1/2	11 3/4
Face of inlet flange to rim of hand wheel, valve open.....	2	2 1/2	3 3/8	4 1/8	4 13/16	5 15/16	7 3/4	8 3/16
Face of inlet hexagon to rim of hand wheel, valve open.....	3 1/8	3 9/16	4 7/16	5 1/4	5 11/16	7 3/16	9 1/4	9 1/2
Diameter of flanges.....	3 3/4	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4
Thickness of flanges.....	1 3/32	7/16	1/2	1 7/32	9/16	5/8	1 1/16	3/4
Centre of body to rim of hand wheel, valve open.....	5 7/16	6 7/16	7 3/4	9	10 3/8	12 1/2	15 1/2	16 3/4
Diameter of hand wheel.....	2 13/16	3	3 7/16	4 1/8	4 3/8	5	6 1/2	7 1/2



J E N K I N S   B R O N Z E   V A L V E S

Y OR BLOW-OFF

Extra Heavy Pattern

Renewable Seat Ring

Regularly Fitted with No. 80-A Disc for 400 Pounds Oil, Water,  
Gas Working Pressures

For 250 Pounds Steam Working Pressure Use No. 1120 Disc

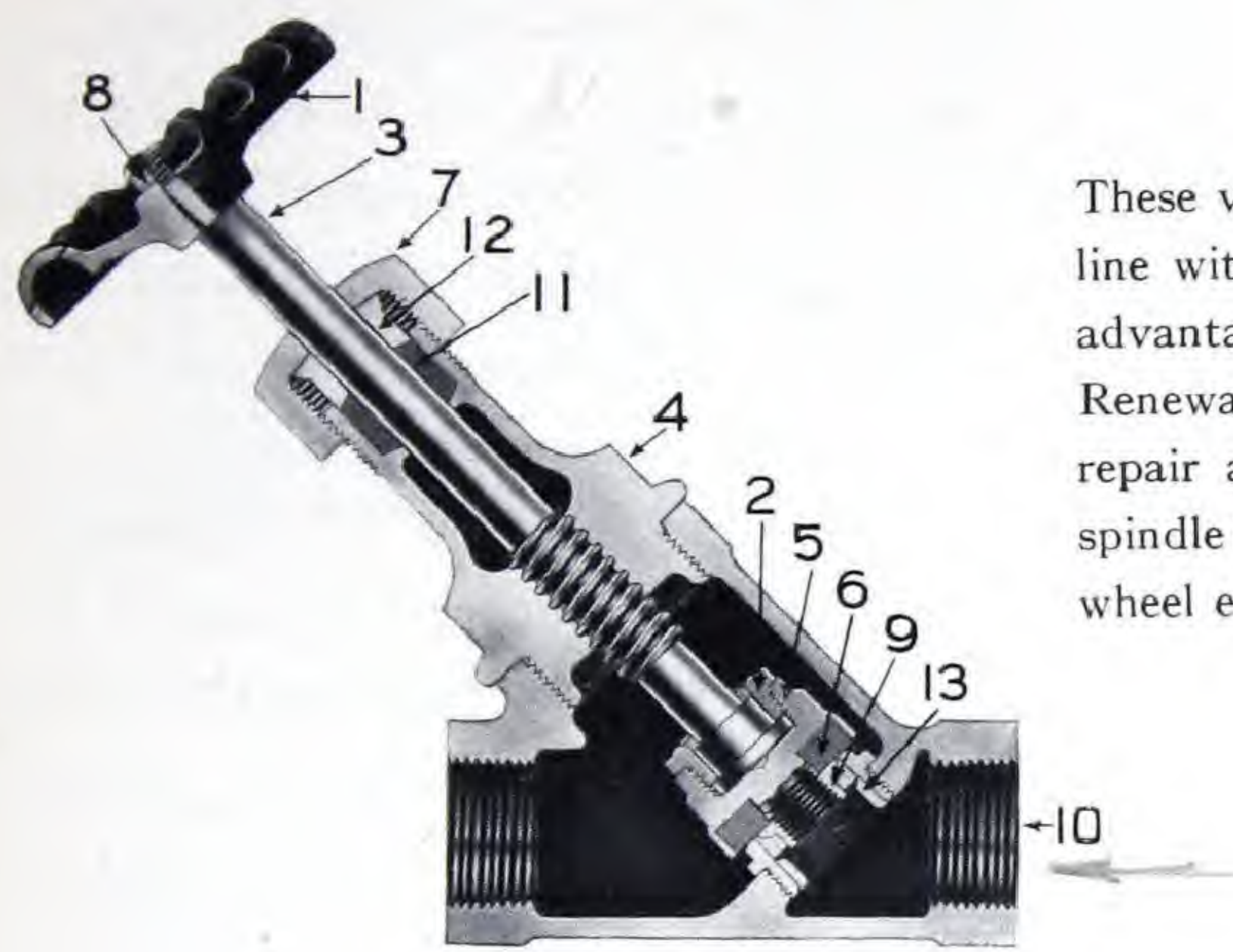


Fig. 134  
Sectional View

These valves allow an opening practically in line with the pipe, and have the additional advantage of the Jenkins Renewable Disc and Renewable Seat Ring which permits easy repair and a tight valve at all times. The spindle is at a 45° angle which makes the hand wheel easily accessible in close quarters.

List Prices of Parts

Sizes. ....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel .....	.20	.20	.25	.30	.40	.45	1.20	1.30
2. Lock Nut .....	.15	.20	.20	.20	.25	.35	.70	.75
3. Spindle .....	.60	1.20	1.75	2.50	2.90	3.75	9.70	10.85
4. Bonnet .....	1.00	1.85	3.75	5.00	5.80	8.20	14.50	21.75
5. Disc Holder .....	.30	.45	.60	.75	.95	1.35	3.15	3.50
7. Packing Nut .....	.30	.35	.55	.60	.70	.75	2.00	2.30
8. Wheel Nut .....	.05	.05	.05	.05	.05	.15	.15	.15
9. Disc Nut or Plate .....	.05	.05	.05	.10	.15	.15	.55	.60
11. Packing .....	.05	.05	.06	.06	.06	.06	.10	.10
12. Gland .....	.20	.20	.25	.25	.25	.35	.45	.55
13. Seat Ring .....	.50	.50	.65	.70	.85	.90	1.30	1.70

For list price of Disc, part 6, see page 212.



# JENKINS BRONZE VALVES

## FILTER

### Standard Pattern

For 150 Pounds Steam Working Pressure  
or 250 Pounds Oil, Water, Gas Working Pressure



Fig. 324  
Sectional View  
Code: ABLZS

These valves are made for use in connection with water spray systems as employed in the manufacture of sulphuric acid, and for other purposes where it is essential that the water or other liquid should be perfectly free from scale or sediment. The filtering screen is made of fine brass wire gauze and the bottom end fits tightly on a taper brass tube which is screwed into the opening through the valve seat. As the gauze screen is 6 inches long, the area of filtering surface largely exceeds that of the valve opening, and frequent cleaning is unnecessary. By unscrewing the long cap the screen can be easily taken off the taper tube, washed out and replaced in a few minutes. The screens regularly furnished are made of No. 50 mesh, No. 35 gauge brass wire. Other sizes wire and mesh will be furnished, if specified. Prices on application.

Size.....	$\frac{1}{2}$
Fig. 324 (Complete).....	5.00
Weight, lbs. and ozs.....	1-15
Filter Screens.....	1.15
Wgt., lbs. and ozs.....	0- $\frac{1}{2}$
Caps.....	2.75
Wgt., lbs. and ozs.....	1-2

### Dimensions, Inches

Face to Face Body.....	2 $\frac{3}{4}$
Centre of Body to Top of Cap.....	7 $\frac{3}{4}$



JENKINS  
BRONZE VALVES  
*with*  
REGRINDING DISC

•

Pages 68 to 88 inclusive



## DESIGN OF JENKINS REGRINDING VALVES

Valves listed on pages 68 to 88.

**D**ESIGNED and manufactured to meet the requirements for high class regrinding valves, Jenkins Regrinding Valves, described in this section, conform to the same high quality of material and workmanship that characterize all of Jenkins products. *These valves are made in globe, angle, cross and check patterns and of screw-over bonnet, union bonnet and bolted bonnet design.*

The bodies are liberally proportioned, uniform in thickness and have free passages. Tapped ends have full length pipe threads. *Ample clearance between the last thread and the diaphragm prevents end of pipe from striking the diaphragm and distorting of the seat.*

Spindles are of manganese bronze, accurately machined. The valves are so designed that when fully opened a back seat is formed permitting the valves to be repacked in this position. When fully open the spindle threads are out of contact with the fluid passing through the valve, the threads are thus protected against foreign deposits or accumulations of an abrasive nature which so commonly cause excessive wear.

A large number of spindle threads engage with the bonnet when the valve is closed, assuring long life.

In all Jenkins Regrinding Valves, *the diameter of the disc is scientifically correct in relation to the seat permitting the valves to be reground repeatedly.*

Stuffing boxes are exceptionally deep, and contain a liberal bulk of packing. Use of a bronze gland compresses the packing, permitting tightness with but

slight effort applied to the packing nut. *This reduces friction around the spindle and provides for ease of operation.*

All of these valves with the exception of Figures 460-467 are provided with hole drilled through the spindle through which a pin is inserted in order to secure disc and spindle during the regrinding operation. Figures 460-467 the disc is slotted for screw driver or other tool.

Malleable iron, non-heat hand wheel is used on all of these valves, which permits a good hand grip when operating the valve.

### Needle Valves

Jenkins Needle Valves are also included in this section, pages 81 and 82. *Made in globe and angle patterns, they are ideally suited for controlling air, gas, gasoline, oil and other fluids where close regulation is essential.* The material, design and workmanship of each type conform to Jenkins high standards of manufacture.

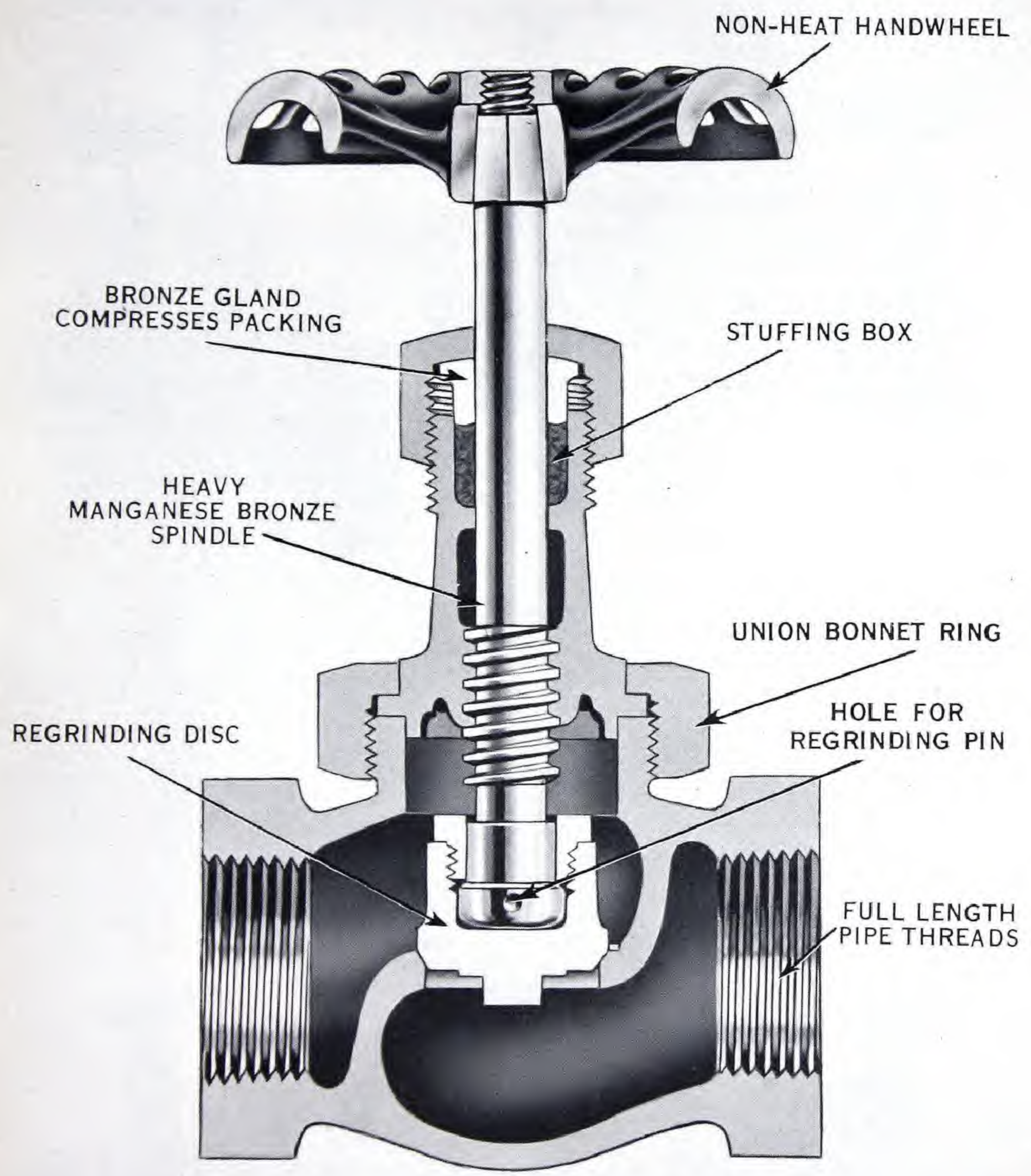
Either *manganese bronze* or *steel spindle* can be supplied; the spindle is extra heavy and has large, clean-cut threads.

Stuffing boxes are liberal in depth, holding a large quantity of packing; the bodies are liberally proportioned, use of a bronze gland compresses the packing, permitting tightness with but slight effort applied to the packing nut. The Valves have uniform thickness of metal and have free passages; hand wheels are malleable iron, enamelled green.



FIG. 425

BRONZE RELIANCE OR MEDIUM PRESSURE



ADDITIONAL INFORMATION LISTED ON FOLLOWING PAGES.



# JENKINS BRONZE VALVES

## GLOBE, ANGLE, CROSS Reliance or Medium Pressure Pattern

For 200 Pounds Steam or 300 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0191-123456 and 0192-123456



Approved by the Canadian Government Steamship Inspection Board



Fig. 425  
Globe, Screwed  
Code: ABVLN



Fig. 427  
Angle, Screwed  
Code: ABVLR



Fig. 429  
Cross, Screwed  
Code: ABVLW

Sizes	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Figure 425	1.30	1.30	1.50	1.90	2.50	3.50	5.00	7.00	11.00	20.00	29.00
Wgt., lb. and oz.	0-13	0-13	0-14	1-9	2-6	3-7	4-14	6-14	10-9	18-8	25-14
Figure 426				5.00	6.00	8.00	11.00	14.00	20.00	33.00	48.00
Wgt., lb. and oz.				3-0	4-9	6-9	8-14	12-0	18-13	29-11	39-0
Fig. 427	1.30	1.30	1.50	1.90	2.50	3.50	5.00	7.00	11.00	20.00	29.00
Wgt., lb. and oz.	0-12	0-12	0-13	1-8	2-5	3-4	4-11	6-10	10-7	18-2	25-5
Figure 428				5.00	6.00	8.00	11.00	14.00	20.00	33.00	48.00
Wgt., lb. and oz.				4-4	6-13	9-1	11-8	13-7	18-13	29-11	39-0
Figure 429				2.65	3.50	4.75	6.00	9.00	14.00	28.00	42.00
Wgt., lb. and oz.	0-13	0-13	0-15	1-9	2-9	3-10	5-4	7-7	11-9	19-15	28-8
Figure 430					9.25	12.25	17.00	23.00	33.00	48.00	72.00
Wgt., lb. and oz.					9-3	12-2	15-5	18-15	25-9	39-7	52-0



Fig. 426  
Globe, Flanged  
Code: ABVLO



Fig. 428  
Angle, Flanged  
Code: ABVLU



Fig. 430  
Cross, Flanged  
Code: ABVLY



JENKINS BRONZE VALVES

GLOBE, ANGLE, CROSS  
Reliance or Medium Pressure Pattern

For 200 Pounds Steam or 300 Pounds Oil, Water, Gas Working Pressure

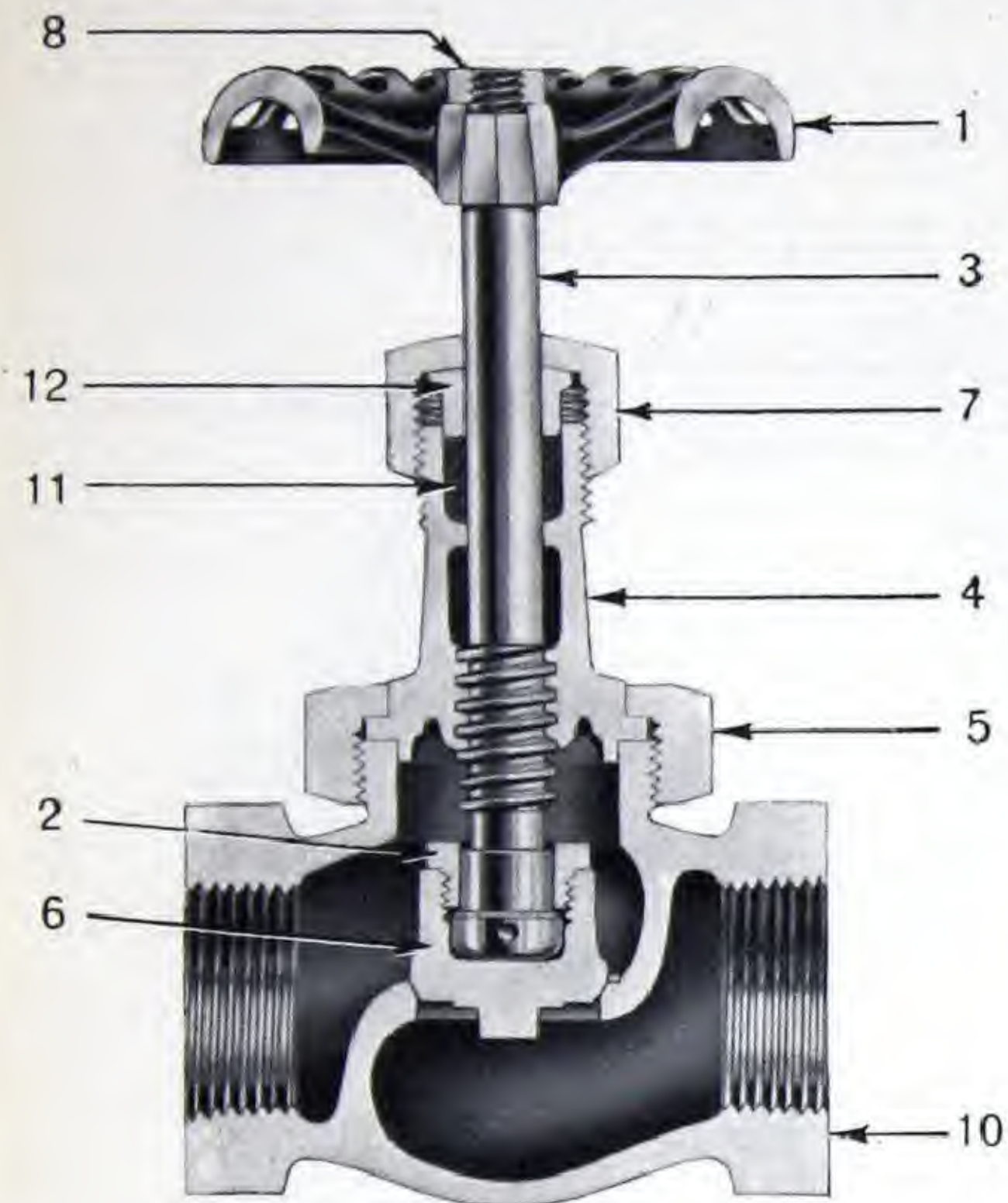


Fig. 425  
Sectional View

Detail of Design

These valves can be reground without removal from the line by inserting a pin or nail in the hole that passes through both the disc and spindle and then proceeding in the usual manner. Jenkins improved design for regrinding valves prevents cutting of shoulders or grooves into the disc during the regrinding operation. This advantage is possible because the disc does not overhang the seat; the faces of the seat and disc being parallel and equal, the contact area remains constant even after repeated regrindings.

On sizes 1/8" to 1/2", inclusive, parts Nos. 2, 3 and 6 are one piece.

List Prices of Parts

Part No.	Sizes	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel		.10	.10	.10	.10	.15	.15	.25	.30	.35	.55	.65
2. Lock nut, globe						.12	.12	.14	.15	.25	.40	.50
2a. Lock nut, angle						.12	.12	.14	.15	.25	.40	.50
3. Spindle, globe		.30	.30	.30	.40	.40	.48	.65	.80	1.45	2.25	3.50
3a. Spindle, angle, cross		.30	.30	.30	.40	.40	.48	.65	.80	1.45	2.25	3.50
4. Bonnet		.25	.40	.40	.50	.55	.70	.95	1.40	2.00	4.40	6.50
5. Union bonnet nut		.20	.20	.20	.25	.40	.58	.65	1.05	1.25	2.70	4.70
6. Disc (regrinding)						.30	.35	.46	.60	.70	2.00	2.85
7. Packing nut		.12	.20	.20	.25	.30	.35	.50	.55	.70	1.00	1.65
8. Wheel nut		.04	.04	.04	.04	.04	.08	.10	.10	.20	.25	.35
11. Packing		.05	.05	.05	.05	.05	.06	.06	.06	.06	.10	.10
12. Gland		.06	.06	.06	.08	.10	.10	.15	.20	.25	.40	.50

Dimensions, Inches

Sizes	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Globe, face to face, screwed	1 5/8	2 1/16	2 1/8	2 3/8	2 15/16	3 3/8	3 7/8	4 3/8	5 3/8	6 3/8	7 1/2
Globe, face to face, flanged		2 7/8	2 7/8	3 5/8	4 1/8	4 5/8	5	5 7/8	6 7/8	7	8 1/2
Angle, centre to face, screwed	1 3/16	1 1/32	1 1/16	1 3/16	1 7/16	1 11/16	1 15/16	2 3/16	2 11/16	3 5/16	3 3/4
Angle, centre to face, flanged		1 5/8	1 5/8	2 1/4	2 7/16	2 1/2	2 7/8	3 1/8	3 5/8	4 1/4	4 1/2
Diameter of flanges		2 1/2	2 1/2	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges		9/32	3/32	5/16	11/32	3/8	13/32	7/16	1/2	9/16	5/8
Globe, centre to top of wheel, open	2 3/4	3 5/8	3 5/8	4 5/16	4 15/16	5 5/8	6 3/8	7 9/16	8 9/16	9 7/8	11 11/16
Angle, centre to top of wheel, open	2 13/16	3 5/8	3 5/8	4 5/16	4 7/8	5 5/8	6 7/16	7 9/16	8 9/16	9 15/16	11 9/16
Diameter of hand wheel	1 3/4	2 1/16	2 1/16	2 7/16	2 13/16	3	3 1/16	4 1/8	4 3/8	5	5 15/16



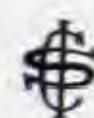
# J E N K I N S   B R O N Z E   V A L V E S

## GLOBE, ANGLE, CROSS Reliance or Medium Pressure Pattern

For 200 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0195-123456 and 0196-123456



Approved by the Canadian Government Steamship Inspection Board



Fig. 438  
Globe, Flanged  
Code: ABVMP



Fig. 438  
Sectional View



Fig. 440  
Angle, Flanged  
Code: ABVMV

These Regrinding Valves are regularly furnished with bronze discs. This disc has a tapered face. Seating is perfect, assuring tight closing. In the improved Jenkins seating arrangement for regrinding valves, the disc does not overhang the seat. Repeated regrindings cannot cut a shoulder or groove into the disc as the disc never extends beyond the seat contact surface. (When reground in the correct manner it is seldom necessary to reface the seat.)

Sizes.....	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 438.....	Prices on application.....					
Wgt., lbs. and oz.....	7-7	9-4	13-0	20-13	32-8	43-0
Fig. 440.....	Prices on application.....					
Wgt., lbs. and oz.....	9-5	11-10	15-8	20-10	32-6	43-6

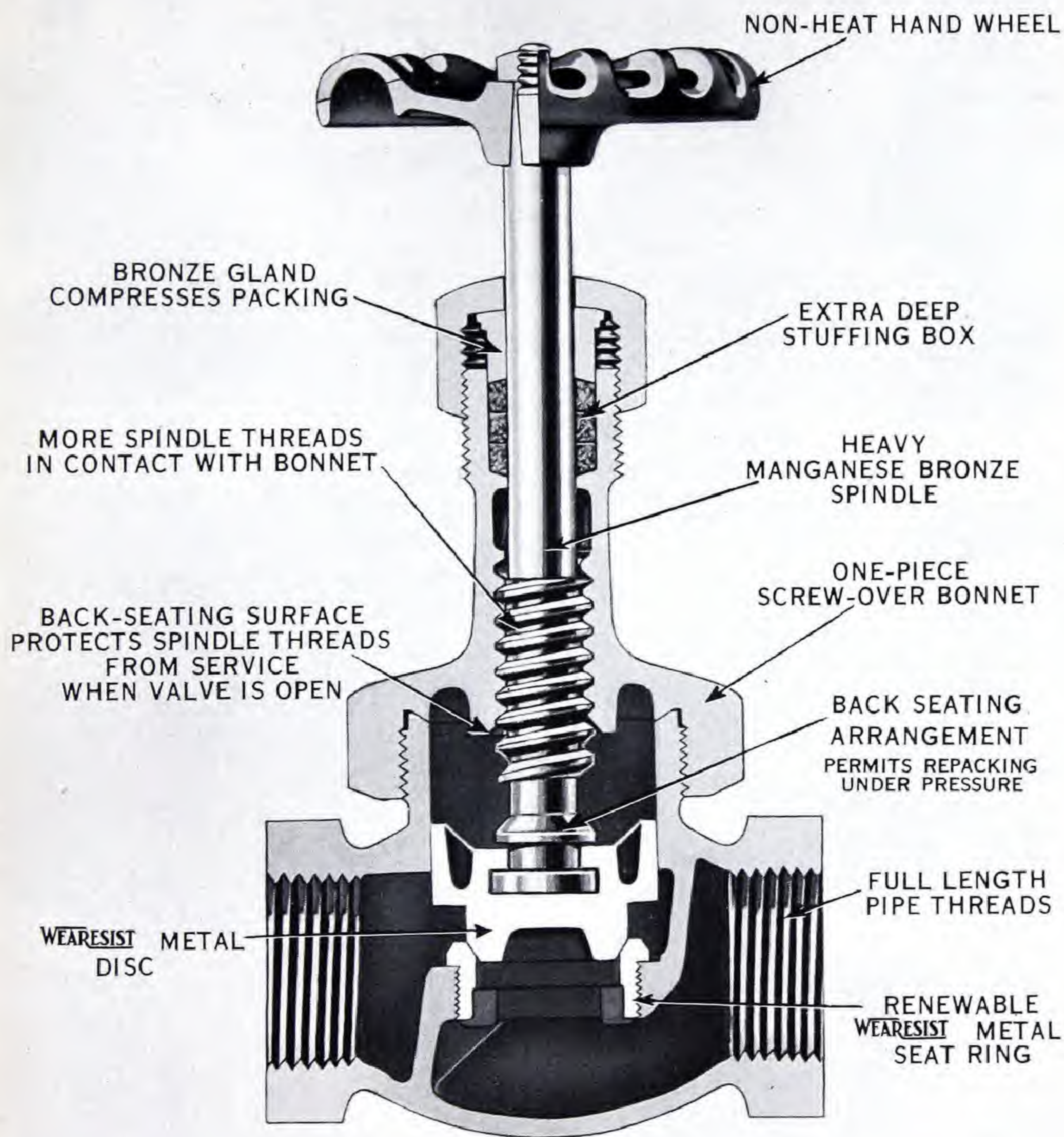
### Dimensions, Inches

Sizes.....	1	1 1/4	1 1/2	2	2 1/2	3
Globe, face to face, flanged.....	4 5/8	5	5 7/8	6 7/8	7	8 1/2
Angle, centre to face, flanged.....	2 1/2	2 7/8	3 1/8	3 5/8	4 1/4	4 1/2
Diameter of flanges.....	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges.....	3/8	13/32	7/16	1/2	9/16	5/8
Globe, centre to top of wheel, open.....	6 5/8	7 3/16	8 1/16	9 5/16	9 1/4	9 3/4
Angle, centre to top of wheel, open.....	6 3/8	6 15/16	7 15/16	8 15/16	9	9 15/16
Diameter of handwheel.....	3	3 7/16	4 1/8	4 3/8	5	5 15/16



## FIG. 460

### BRONZE REGRINDING VALVE



ADDITIONAL INFORMATION LISTED ON FOLLOWING PAGES.



# JENKINS BRONZE VALVES

## REGRINDING GLOBE AND ANGLE Renewable **WEARESIST** Metal Seat Ring and Disc

For 200 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working  
Pressure

Conforming to Canadian Interprovincial  
Specifications. Registration Numbers  
0953-123456 and 0954-123456

Approved by the Canadian Government Steamship  
Inspection Board. Sizes  $\frac{1}{4}$ " to 2"

The seats and discs are of **WEARESIST**, an alloy developed in Jenkins Laboratories. Its resistance to wear is much greater than that of metals ordinarily used in bronze valves. These valves are capable of withstanding working steam pressures up to 200 pounds, and total temperatures of 500° F. Bevel shoulder on spindle, bears against corresponding surface at bottom of bonnet, when wide open, permitting repacking while under pressure. This valve can also be supplied with No. 1120 renewable composition disc and **WEARESIST** seat ring if desired.



Fig. 460  
Globe, Screwed  
Code: ABVOP

Fig. 461  
Globe, Flanged  
(not illustrated)  
Code: ABVOS



Fig. 462  
Angle, Screwed  
Code: ABVOU

Fig. 463  
Angle, Flanged  
(not illustrated)  
Code: ABVOW

Sizes	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 460	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
Wgt. lbs. and oz.	1-3	1-3	1-11	2-7	3-8	5-2	7-4	12-6	18-13	29-0
Fig. 461	3.50	4.00	4.00	5.00	6.00	9.00	11.00	16.50	25.00	34.00
Wgt., lbs. and oz.	1-11	2-0	3-7	4-14	6-9	9-0	11-15	19-3	29-8	41-5
Fig. 462	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.75	15.75	22.00
Wgt., lbs. and oz.	1-4	1-3	1-10	2-6	3-6	4-15	7-1	12-1	18-7	27-6
Fig. 463	3.50	4.00	4.00	5.00	6.00	9.00	11.00	16.50	25.00	34.00
Wgt., lbs. and oz.	1-11	2-0	3-6	4-12	6-5	8-12	11-9	18-10	29-3	39-10

### Dimensions, Inches

Sizes	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
A...	$2\frac{3}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	$3\frac{3}{16}$	$3\frac{3}{4}$	$4\frac{1}{4}$	$4\frac{3}{4}$	$5\frac{3}{4}$	$6\frac{5}{8}$	8
B...	$3\frac{3}{8}$	$3\frac{3}{8}$	4	$4\frac{3}{4}$	$5\frac{3}{8}$	$5\frac{7}{8}$	$6\frac{1}{2}$	$7\frac{1}{2}$	$8\frac{1}{2}$	$9\frac{7}{8}$
C...	$1\frac{3}{16}$	$1\frac{3}{16}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{3}{4}$	$3\frac{1}{4}$	$3\frac{3}{4}$
D...	2	2	$2\frac{3}{8}$	$2\frac{7}{8}$	3	$3\frac{1}{4}$	$3\frac{3}{4}$	$4\frac{1}{4}$	$4\frac{3}{4}$	$5\frac{1}{8}$
E...	3	3	$3\frac{3}{4}$	$4\frac{5}{8}$	$4\frac{7}{8}$	$5\frac{1}{4}$	$6\frac{1}{8}$	$6\frac{1}{2}$	$7\frac{1}{2}$	$8\frac{1}{4}$
F...	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{13}{32}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{17}{32}$	$\frac{3}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$
G...	$4\frac{9}{16}$	$4\frac{9}{16}$	$5\frac{3}{16}$	$5\frac{3}{4}$	$6\frac{5}{8}$	$7\frac{9}{16}$	$8\frac{3}{8}$	$9\frac{3}{8}$	$10\frac{13}{16}$	$11\frac{13}{16}$
H...	$4\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{8}$	$5\frac{11}{16}$	$6\frac{1}{2}$	$7\frac{7}{16}$	$8\frac{1}{4}$	$9\frac{1}{4}$	$10\frac{11}{16}$	$11\frac{1}{2}$
J...	$2\frac{1}{16}$	$2\frac{1}{16}$	$2\frac{7}{16}$	$2\frac{13}{16}$	3	$3\frac{7}{16}$	$4\frac{1}{16}$	$4\frac{3}{8}$	5	$5\frac{15}{16}$

A-Globe, face to face, screwed. B-Globe, face to face, flanged. C-Angle, centre to face, screwed. D-Angle, centre to face, flanged. E-Diameter of flanges. F-Thickness of flanges. G-Globe, centre to top of wheel, open. H-Angle, centre to top of wheel, open. J-Diameter of hand wheel.

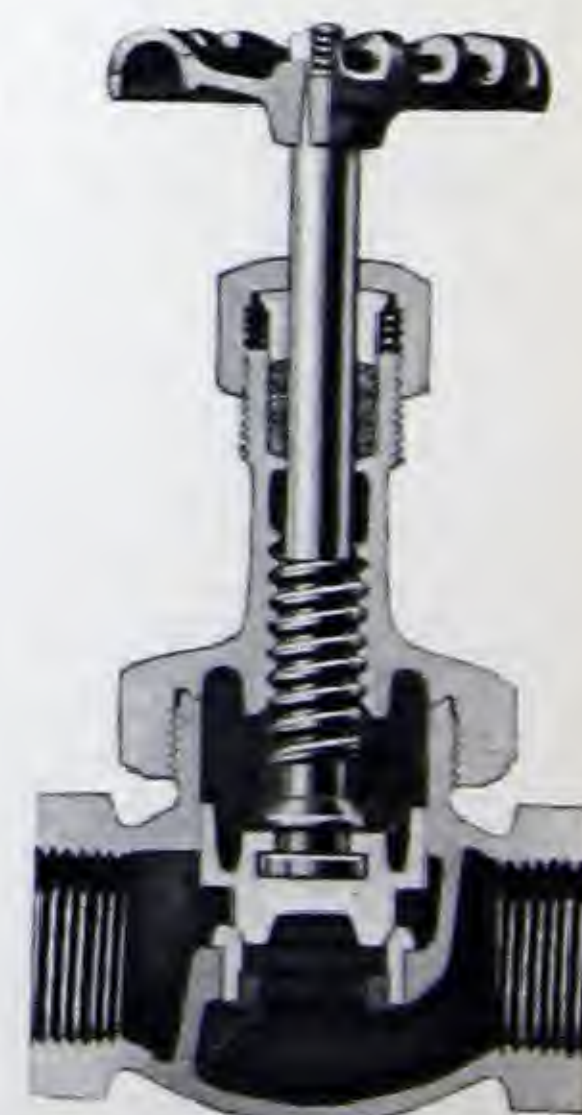


Fig. 460  
Sectional View



# JENKINS BRONZE VALVES

## REGRINDING GLOBE AND ANGLE Throttling Type-Cone Plug Seated Renewable **WEARE**SIST Metal Seat Ring and Plug Disc

For 200 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure



**Fig. 464**  
Globe, Screwed  
Code: ABVOY

**Fig. 465**  
Globe, Flanged  
(not illustrated)  
Code: ABVPA



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0953-123456 and  
0951-123456



Approved by the Canadian Government Steamship  
Inspection Board. Sizes  $\frac{1}{4}$ " to 2"

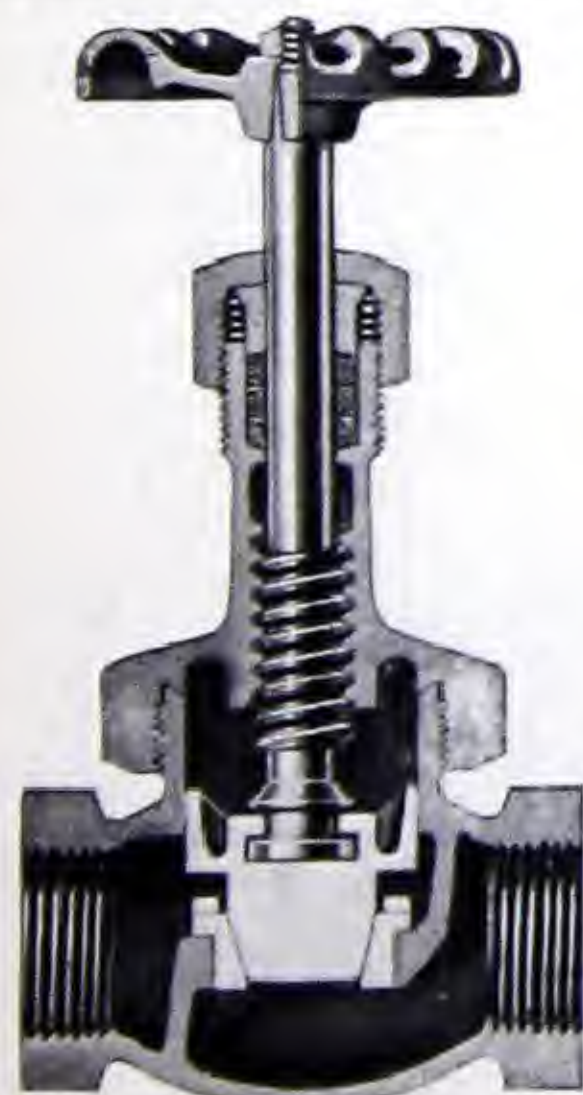
The valves are of the cone plug seated type. They are especially recommended for throttling or where extremely severe services are encountered. The seat ring and plug type disc are of **WEARE**SIST. This alloy, due to its resistance to certain chemical actions at high temperatures, its toughness, makes it particularly suited for this service. A bevel shoulder on spindle bears against corresponding surface at bottom of bonnet, when valve is wide open, which permits repacking while under pressure.



**Fig. 466**  
Angle, Screwed  
Code: ABVPE

**Fig. 467**  
Angle, Flanged  
(not illustrated)  
Code: ABVPI

Sizes . . . . .	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 464 . . . . .	2.20	2.50	3.20	4.40	5.60	8.00	11.00	17.50	31.50	44.00
Wgt., lbs. and oz. . . . .	1-4	1-3	1-12	2-8	3-6	5-6	7-4	12-6	18-13	29-0
Fig. 465 . . . . .	7.00	8.00	8.00	10.00	12.00	18.00	22.00	33.00	50.00	68.00
Wgt., lbs. and oz. . . . .	1-11	2-0	3-7	4-14	6-9	9-0	11-15	19-3	29-8	41-5
Fig. 466 . . . . .	2.20	2.50	3.20	4.40	5.60	8.00	11.00	17.50	31.50	44.00
Wgt., lbs. and oz. . . . .	1-4	1-3	1-10	2-6	3-6	4-15	7-1	12-1	18-7	27-6
Fig. 467 . . . . .	7.00	8.00	8.00	10.00	12.00	18.00	22.00	33.00	50.00	68.00
Wgt., lbs. and oz. . . . .	1-11	2-0	3-6	4-12	6-5	8-12	11-9	18-10	29-3	39-10



**Fig. 464**  
Sectional View

### Dimensions, Inches

Sizes	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
A . . . . .	$2\frac{3}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	$3\frac{3}{16}$	$3\frac{3}{4}$	$4\frac{1}{4}$	$4\frac{3}{4}$	$5\frac{3}{4}$	$6\frac{5}{8}$	8
B . . . . .	$3\frac{3}{8}$	$3\frac{3}{8}$	4	$4\frac{3}{4}$	$5\frac{3}{8}$	$5\frac{7}{8}$	$6\frac{1}{2}$	$7\frac{1}{2}$	$8\frac{1}{2}$	$9\frac{7}{8}$
C . . . . .	$1\frac{3}{16}$	$1\frac{3}{16}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{3}{4}$	$3\frac{1}{4}$	$3\frac{3}{4}$
D . . . . .	2	2	$2\frac{3}{8}$	$2\frac{7}{8}$	3	$3\frac{1}{4}$	$3\frac{3}{4}$	$4\frac{1}{4}$	$4\frac{3}{4}$	$5\frac{1}{8}$
E . . . . .	3	3	$3\frac{3}{4}$	$4\frac{5}{8}$	$4\frac{7}{8}$	$5\frac{1}{4}$	$6\frac{1}{8}$	$6\frac{1}{2}$	$7\frac{1}{2}$	$8\frac{1}{4}$
F . . . . .	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{13}{32}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{17}{32}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$
G . . . . .	$4\frac{3}{16}$	$4\frac{9}{16}$	$5\frac{3}{16}$	$5\frac{3}{4}$	$6\frac{5}{8}$	$7\frac{1}{16}$	$8\frac{3}{8}$	$9\frac{3}{8}$	$10\frac{13}{16}$	$11\frac{13}{16}$
H . . . . .	$4\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{8}$	$5\frac{11}{16}$	$6\frac{1}{2}$	$7\frac{7}{16}$	$8\frac{1}{4}$	$9\frac{1}{4}$	$10\frac{11}{16}$	$11\frac{1}{2}$
J . . . . .	$2\frac{1}{16}$	$2\frac{1}{16}$	$2\frac{7}{16}$	$2\frac{13}{16}$	3	$3\frac{7}{16}$	$4\frac{1}{8}$	$4\frac{3}{8}$	5	$5\frac{15}{16}$

A-Globe, face to face, screwed. B-Globe, face to face, flanged. C-Angle, centre to face, screwed. D-Angle, centre to face, flanged. E-Diameter of flanges. F-Thickness of flanges. G-Globe, centre to top of wheel, open. H-Angle, centre to top of wheel, open. J-Diameter of handwheel.



# J E N K I N S   B R O N Z E   V A L V E S

## GLOBE, ANGLE, CROSS

Sterling or Extra Heavy Pattern—Renewable Seat Ring

Screwed: For 300 Pounds Steam or 500 Pounds Oil, Water, Gas Working Pressure

Flanged: For 250 Pounds Steam or 375 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0193-123456 and 0194-123456



Approved by the Canadian Government Steamship Inspection Board



**Fig. 500**  
Globe, Screwed  
Code: ABVTM



**Fig. 502**  
Angle, Screwed  
Code: ABVTR



**Fig. 504**  
Cross, Screwed  
Code: ABVTY

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 500.....	3.00	3.50	4.00	5.00	6.50	8.25	11.00	16.00	33.00	45.00
Wgt., lbs. and oz.....	1-8	1-7	2-3	3-3	4-12	6-15	10-3	16-12	27-1	38-0
Fig. 501.....		6.00	6.00	7.50	10.00	13.00	17.00	24.00	43.00	57.00
Wgt., lbs. and oz.....		3-2	4-12	6-6	10-7	12-11	20-4	28-13	42-2	56-8
Fig. 502.....	3.00	3.50	4.00	5.00	6.50	8.25	11.00	16.00	33.00	45.00
Wgt., lbs. and oz.....	1-8	1-7	2-1	3-0	4-11	6-11	9-14	16-4	25-8	36-11
Fig. 503.....		6.00	6.00	7.50	10.00	13.00	17.00	24.00	43.00	57.00
Wgt., lbs. and oz.....		3-2	4-13	6-11	9-9	12-8	19-15	28-1	41-6	55-4
Fig. 504.....	4.25	4.25	4.75	5.75	7.50	9.50	12.50	18.00	40.00	55.00
Wgt., lbs. and oz.....	2-1	2-0	3-1	4-3	6-0	8-0	12-0	19-0	30-2	43-3
Fig. 505.....			7.50	9.00	11.00	15.50	20.50	30.00	52.00	70.00
Wgt., lbs. and oz.....			6-5	8-15	12-13	16-0	26-0	38-12	52-3	67-5



**Fig. 501**  
Globe, Flanged  
Code: ABVTO



**Fig. 503**  
Angle, Flanged  
Code: ABVTU



**Fig. 505**  
Cross, Flanged  
Code: ABVUA



J E N K I N S    B R O N Z E    V A L V E S

GLOBE, ANGLE, CROSS

Sterling—Extra Heavy Pattern—Renewable Seat Ring

Screwed: For 300 Pounds Steam or 500 Pounds Oil, Water, Gas Working Pressure  
Flanged: For 250 Pounds Steam or 375 Pounds Oil, Water, Gas Working Pressure

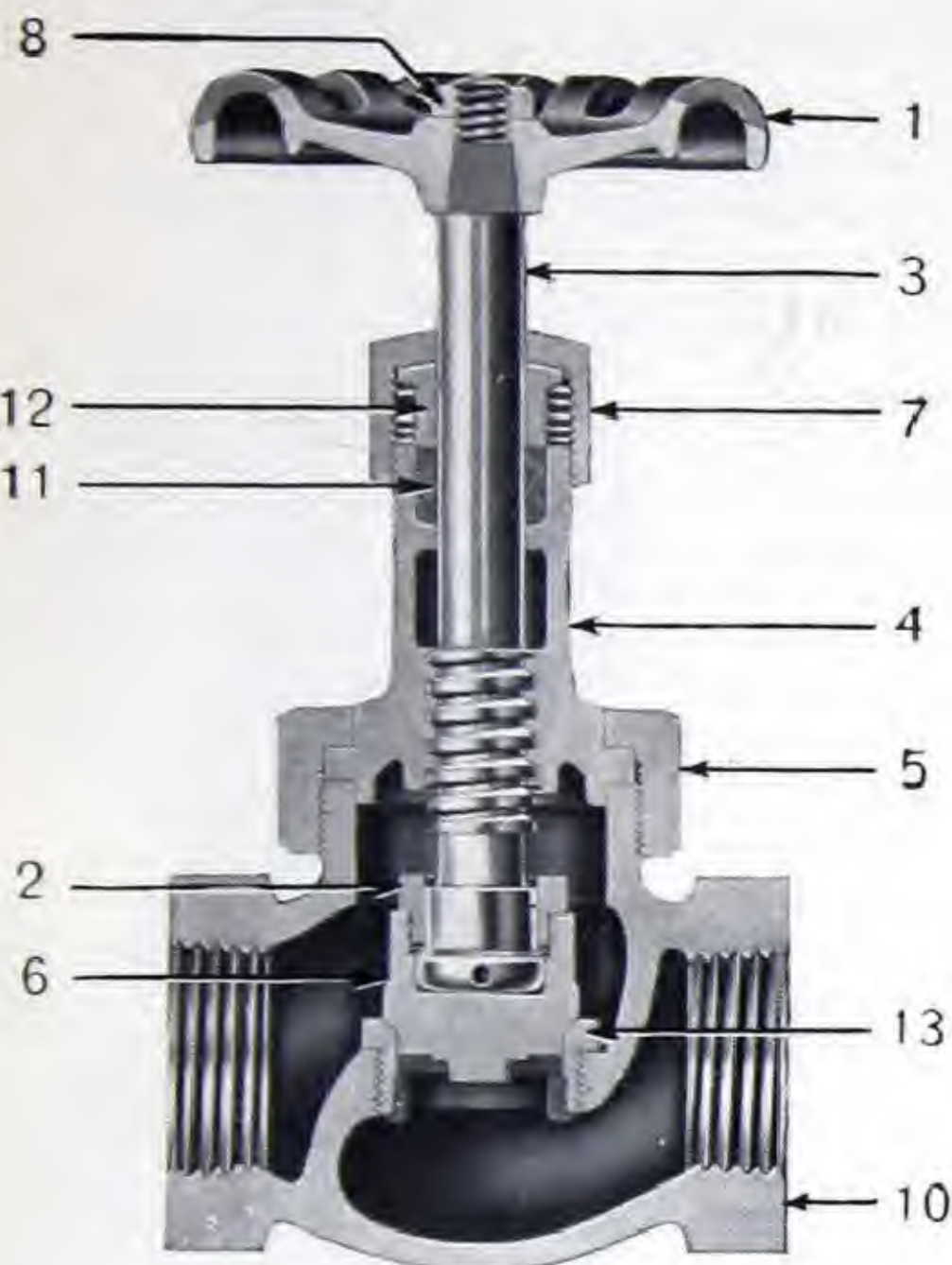


Fig. 500  
Sectional View

Detail of Design

These valves can be reground without removal from the line by inserting a pin or nail in the hole that passes through both the disc and spindle and then proceeding in the usual manner. Jenkins improved design for regrinding valves prevents cutting of shoulders or grooves into the disc during the regrinding operation. This advantage is possible because the disc does not overhang the seat; the faces of the seat and disc being parallel and equal, the contact area remains constant even after repeated regrindings.

List Prices of Parts

Part No. .... Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel .....	.10	.10	.15	.15	.25	.30	.35	.55	.75	.75
2. Lock nut, globe .....	Comb. with Part 3 & 6			.15	.15	.20	.25	.35	.45	.55
2a. Lock nut, angle .....	Comb. with Part 3a & 6			.15	.15	.20	.25	.35	.45	.55
3. Spindle, globe .....	.40	.40	.50	.50	.65	.80	1.30	1.70	2.65	4.00
3a. Spindle, angle, cross .....	.40	.40	.50	.50	.65	.80	1.30	1.70	2.65	4.00
4. Bonnet .....	.45	.45	.50	.55	.70	1.00	1.50	2.25	5.00	6.50
5. Union bonnet nut .....	.35	.35	.60	.65	.95	1.30	1.90	2.50	5.50	7.00
6. Disc (regrinding) .....	Comb. with Part 3 & 3a			.40	.50	.65	.70	1.50	4.50	6.80
7. Packing nut .....	.20	.20	.30	.35	.50	.55	.65	.75	1.65	2.00
8. Wheel nut .....	.05	.05	.05	.05	.10	.10	.10	.20	.25	.35
11. Packing .....	.05	.05	.05	.05	.06	.06	.06	.06	.10	.10
12. Gland .....	.15	.15	.15	.20	.20	.25	.30	.40	.70	1.00
13. Seat ring .....	.25	.25	.30	.45	.50	.60	.75	.85	1.10	2.00

Dimensions, Inches

Sizes .....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Globe, face to face, screwed .....	2 3/8	2 3/8	2 3/4	3 1/4	3 3/4	4 3/8	5	6 1/8	7 1/4	8 3/8
Globe, face to face, flanged .....	3 3/8	4	4 3/4	5 1/2	6	7	8	9	10	
Angle, centre to face, screwed .....	1 3/16	1 3/16	1 3/8	1 5/8	1 7/8	2 3/16	2 1/2	3 1/16	3 5/8	4 3/16
Angle, centre to face, flanged .....	2 1/8	2 3/8	2 7/8	3	3 1/4	3 3/4	4 1/4	4 3/4	5 1/8	
Diameter of flanges .....	3	3 3/4	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4	
Thickness of flanges .....	3/8	13/32	7/16	1/2	17/32	9/16	5/8	11/16	3/4	
Globe, centre to top of wheel, open .....	4 1/2	4 1/2	5 1/8	5 3/4	6 5/8	7 5/8	8 3/4	10 1/16	11 13/16	13 5/16
Angle, centre to top of wheel, open .....	4 1/2	4 1/2	4 13/16	5 11/16	6 1/2	7 3/16	8 5/8	9 5/16	11 13/16	13 5/16
Diameter of hand wheel .....	2 7/16	2 7/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5	6 1/2	7 1/2



# JENKINS BRONZE VALVES

GLOBE, ANGLE,  
Regrinding—Bolted Bonnet  
Sterling or Extra Heavy Pattern—Outside Screw and Yoke  
Renewable Seat Ring

For 250 Pounds Steam Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0197-123456 and 0198-123456



Approved by the Canadian Government Steamship Inspection Board



Fig. 513  
Globe, Flanged  
Code: ABVUJ

Fig. 515  
Angle, Flanged  
Code: ABVUL  
(Not illustrated)

The spindle travels up through the yoke when opening, and it can be ascertained at a glance whether the valve is open or closed. Jenkins improved design for regrinding valves prevents cutting of shoulder or groove into the disc during the regrinding operation.

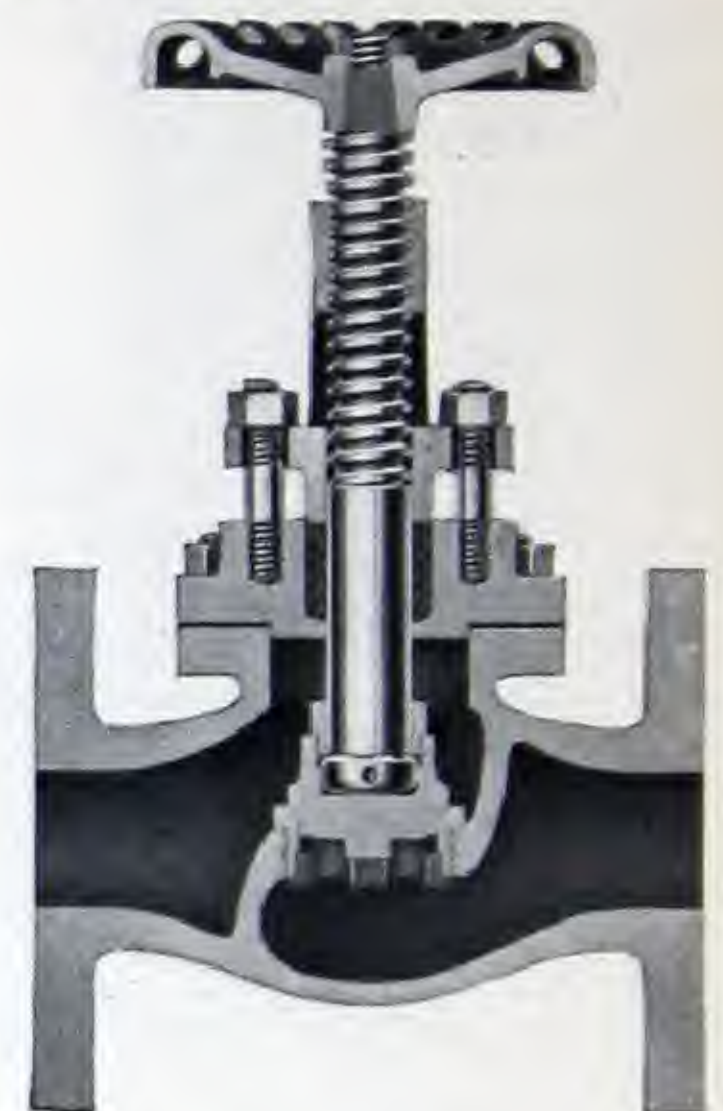


Fig. 513  
Sectional View

Sizes.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 513.....	Prices on application.....						
Wgt., lbs. and oz.....	9-0	13-1	17-0	24-14	39-3	51-11	63-12
Fig. 515.....	Prices on application.....						
Wgt., lbs. and oz.....	8-6	12-15	16-5	23-0	37-0	48-0	60-1

## Dimensions, Inches

Sizes.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Globe, face to face, flanged.....	5	$5\frac{1}{2}$	6	7	$8\frac{7}{8}$	$9\frac{1}{2}$	10
Angle, centre to face, flanged.....	$2\frac{7}{8}$	3	$3\frac{1}{4}$	$3\frac{3}{4}$	$4\frac{1}{4}$	$4\frac{3}{4}$	$5\frac{1}{8}$
Diameter of flanges.....	$4\frac{5}{8}$	$4\frac{7}{8}$	$5\frac{1}{4}$	$6\frac{1}{8}$	$6\frac{1}{2}$	$7\frac{1}{2}$	$8\frac{1}{4}$
Thickness of flanges.....	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{17}{32}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$
Globe, centre to top of wheel, open.....	$6\frac{11}{16}$	$7\frac{3}{16}$	$8\frac{1}{8}$	$9\frac{3}{16}$	10	$11\frac{7}{8}$	$12\frac{9}{16}$
Angle, centre to top of wheel, open.....	$6\frac{11}{16}$	$7\frac{3}{16}$	$8\frac{1}{8}$	$9\frac{5}{16}$	$9\frac{7}{8}$	$11\frac{15}{16}$	$12\frac{9}{16}$
Diameter of hand wheel.....	3	$3\frac{7}{16}$	$4\frac{1}{8}$	$4\frac{3}{8}$	5	$6\frac{1}{2}$	$7\frac{1}{2}$



JENKINS BRONZE VALVES

REGRINDING GLOBE AND ANGLE  
Renewable WEARESIST Metal Seat Ring and Disc



Fig. 530  
Globe, Screwed  
Code: ABVWO

Fig. 531  
Globe, Flanged  
(not illustrated)  
Code: ABVWU

Screwed: For 300 Pounds Steam or 500 Pounds Oil, Water, Gas Working Pressure  
Flanged: For 250 Pounds Steam or 375 Pounds Oil, Water, Gas Working Pressure

Conforming to Canadian Interprovincial Specifications. Registration Numbers 0193-123456 and 0194-123456

Approved by the Canadian Government Steamship Inspection Board

These valves have two piece union bonnets. The seats and discs are of WEARESIST metal. More regrindings are possible with Jenkins improved design for regrinding valves. The discs and seats wear evenly in the grinding operation. The faces of disc and seat are always parallel and equal. This advantage is possible because the disc does not overhang the seat. Repeated regrindings cannot cut a shoulder or groove into the disc as the disc never extends beyond the seat contact surface.



Fig. 532  
Angle, Screwed  
Code: ABVWY

Fig. 533  
Angle, Flanged  
(not illustrated)  
Code: ABVXA

Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 530	3.00	3.50	4.00	5.00	6.50	8.25	11.00	16.00	33.00	45.00
Wgt., lbs. and oz.	1-8	1-7	2-3	3-3	4-12	6-15	10-3	16-12	27-1	38-0
Fig. 531			6.00	7.50	10.00	13.00	17.00	24.00	43.00	57.00
Wgt., lbs. and oz.			4-12	6-6	10-7	12-11	20-4	28-13	42-2	56-8
Fig. 532	3.00	3.50	4.00	5.00	6.50	8.25	11.00	16.00	33.00	45.00
Wgt., lbs. and oz.	1-8	1-7	2-1	3-0	4-11	6-11	9-14	16-4	25-8	36-11
Fig. 533			6.00	7.50	10.00	13.00	17.00	24.00	43.00	57.00
Wgt., lbs. and oz.			4-13	6-11	9-8	12-8	19-15	28-1	41-6	55-4

Dimensions, Inches

Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
A....	2 3/8	2 3/8	2 3/4	3 1/4	3 3/4	4 3/8	5	6 1/8	7 1/4	8 3/8
B....			4	4 3/4	5 1/2	6	7	8	9	10
C....	1 3/16	1 3/16	1 3/8	1 5/8	1 7/8	2 3/16	2 1/2	3 1/16	3 5/8	4 3/16
D....			2 3/8	2 7/8	3	3 1/4	3 3/4	4 1/4	4 3/4	5 1/8
E....			3 3/4	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4
F....			1 3/32	7/16	1/2	1 7/32	9/16	5/8	1 1/16	3/4
G....	4 1/2	4 1/2	5 1/8	5 3/4	6 5/8	7 5/8	8 3/4	10 1/16	11 13/16	13 5/16
H....	4 1/2	4 1/2	4 13/16	5 1/16	6 1/2	7 9/16	8 5/8	9 15/16	11 13/16	13 5/16
J....	2 7/16	2 7/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5	6 1/2	7 1/2

A-Globe, face to face, screwed. B-Globe, face to face, flanged. C-Angle, centre to face, screwed. D-Angle, centre to face, flanged. E-Diameter of flanges. F-Thickness of flanges. G-Globe, centre to top of wheel, open. H-Angle, centre to top of wheel, open. J-Diameter of hand wheel.

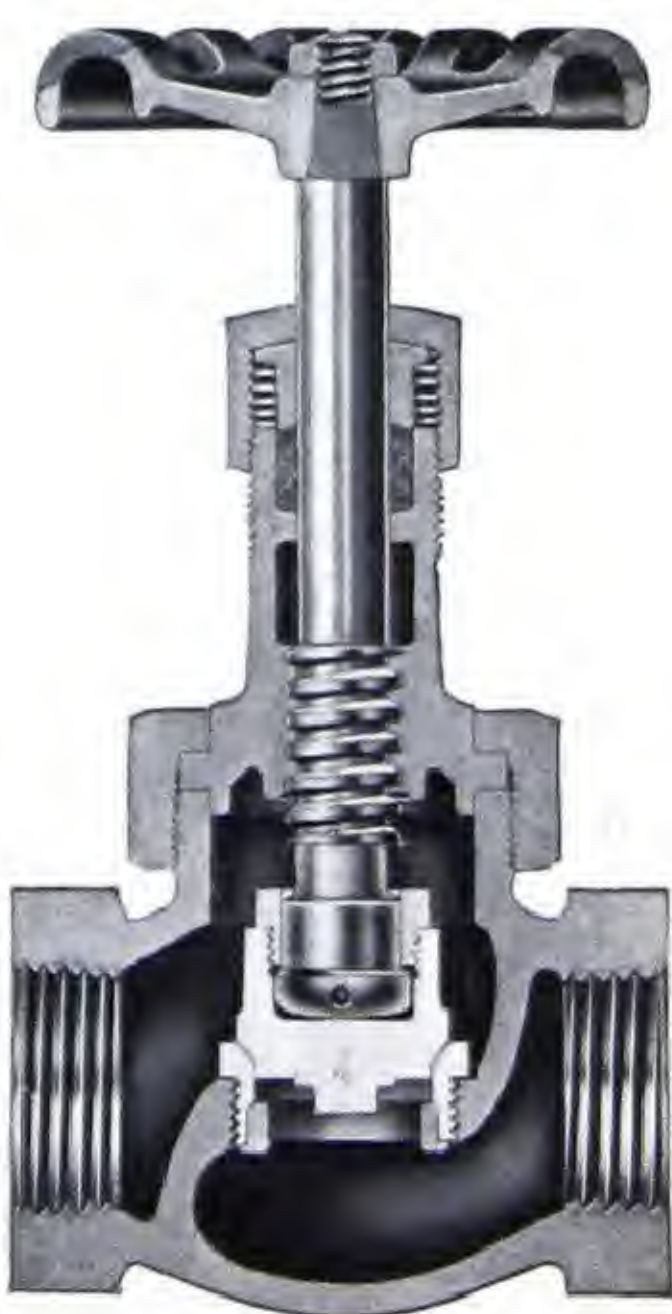


Fig. 530  
Sectional View



# JENKINS BRONZE VALVES

## REGRINDING GLOBE AND ANGLE

Throttling Type—Cone Plug Seated

Renewable **WEAREISIT** Metal Seat Ring and Disc

Screwed: For 300 Pounds Steam or 500 Pounds Oil, Water, Gas Working Pressure

Flanged: For 250 Pounds Steam  
or 375 Pounds Oil, Water, Gas  
Working Pressure

Conforming to Canadian  
Interprovincial Specifications  
Registration Numbers 0193-  
123456 and 0194-123456

Approved by the Canadian Government  
Steamship Inspection Board

These valves have two piece union bonnets. Cone plug discs and seat rings of **WEAREISIT** Metal make them particularly suitable for throttling service or where severe conditions exist. When these valves are wide open a back seating arrangement permits re-packing under pressure. Flanged valves have American extra heavy flange dimensions and are suitable for 250 pounds working steam pressure.



Fig. 534  
Globe, Screwed  
Code: ABVXE

Fig. 535  
Globe, Flanged  
(not illustrated)  
Code: ABVXI



Fig. 536  
Angle, Screwed  
Code: ABVXL

Fig. 537  
Angle, Flanged  
(not illustrated)  
Code: ABVXO

Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 534	3.00	3.50	4.00	5.00	6.50	8.25	11.00	16.00	33.00	45.00
Wgt., lbs. and oz.	1-8	1-7	2-4	3-4	4-13	7-0	10-5	16-14	27-4	38-5
Fig. 535			6.00	7.50	10.00	13.00	17.00	24.00	43.00	57.00
Wgt., lbs. and oz.			4-13	6-8	10-9	12-13	20-6	28-15	42-6	56-14
Fig. 536	3.00	3.50	4.00	5.00	6.50	8.25	11.00	16.00	33.00	45.00
Wgt., lbs. and oz.	1-8	1-7	2-2	3-2	4-12	6-14	10-1	16-8	27-0	38-1
Fig. 537			6.00	7.50	10.00	13.00	17.00	24.00	43.00	57.00
Wgt., lbs. and oz.			4-14	6-13	9-10	12-11	20-1	28-6	41-10	55-10

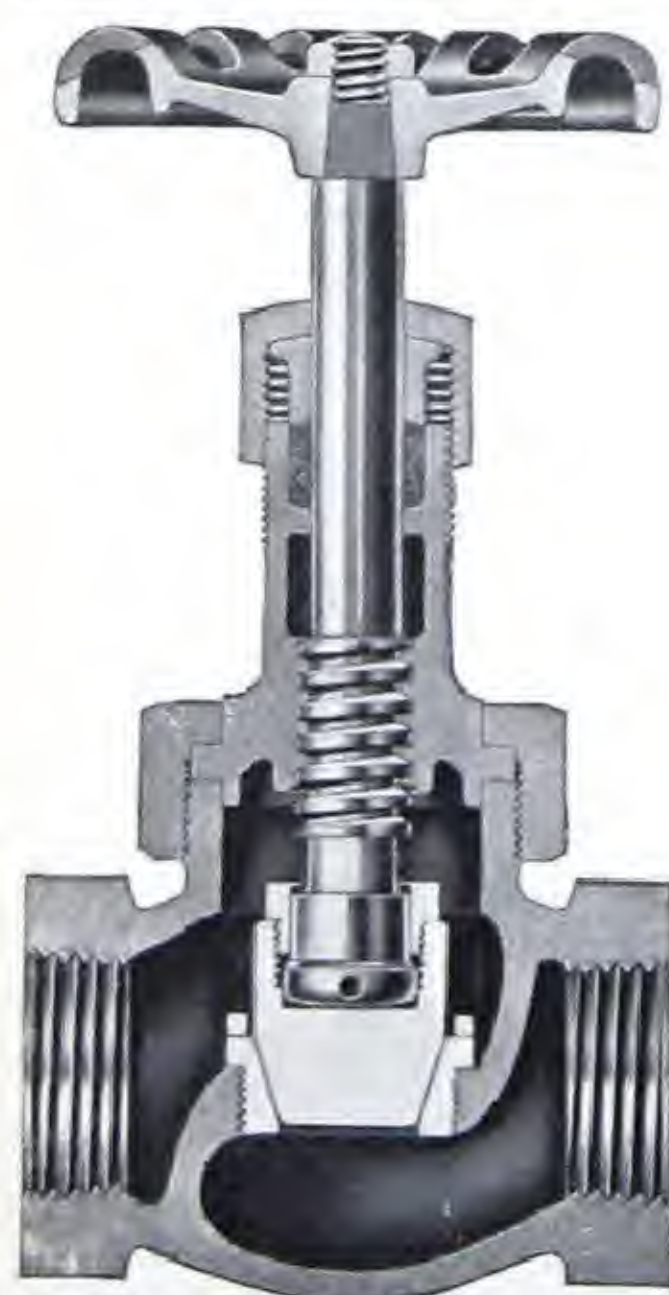


Fig. 534  
Sectional View

### Dimensions, Inches

Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
A....	2 3/8	2 3/8	2 3/4	3 1/4	3 3/4	4 3/8	5	6 1/8	7 1/4	8 3/8
B....			4	4 3/4	5 1/2	6	7	8	9	10
C....	1 3/16	1 3/16	1 3/8	1 5/8	1 7/8	2 3/16	2 1/2	3 1/16	3 5/8	4 3/16
D....			2 3/8	2 7/8	3	3 1/4	3 3/4	4 1/4	4 3/4	5 1/8
E....			3 3/4	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4
F....			1 3/32	7/16	1/2	1 7/32	9/16	5/8	1 1/16	3/4
G....	4 1/2	4 1/2	5 1/8	5 3/4	6 5/8	7 5/8	8 3/4	10 1/16	11 13/16	13 5/16
H....	4 1/2	4 1/2	4 13/16	5 11/16	6 1/2	7 1/16	8 5/8	9 15/16	11 13/16	13 5/16
J....	2 7/16	2 7/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5	6 1/2	7 1/2

A-Globe, face to face, screwed. B-Globe, face to face, flanged. C-Angle, centre to face, screwed. D-Angle, centre to face, flanged. E-Diameter of flanges. F-Thickness of flanges. G-Globe, centre to top of wheel, open. H-Angle, centre to top of wheel, open. J-Diameter of handwheel.



JENKINS BRONZE VALVES

NEEDLE, GLOBE AND ANGLE

Standard Pattern Bronze or Steel Spindle

For 200 Pounds Oil, Water, Gas Working Pressure



Fig. 741  
Globe  
Steel Spindle  
Code: ABWRI

These Jenkins Needle Valves are ideally suited for controlling air, gas, gasoline, oil and other fluids that require close regulation. The valves are supplied with either bronze or steel spindle.

These valves are made of the same high grade bronze as the standard Jenkins Valves. The bonnet is of the one-piece type. The wheel, of malleable iron, enamelled green.



Fig. 744  
Angle  
Bronze Spindle  
Code: ABWRO

Fig. 743  
Globe  
Bronze Spindle  
Code: ABWRM

Fig. 742  
Angle  
Steel Spindle  
Code: ABWRK

Sizes	1/8	1/4	3/8	1/2	3/4
Fig. 741, Globe, Steel spindle	2.60	2.75	3.25	4.00	5.50
Wgt., lbs. and oz.	0-6	0-7	0-7	0-12	1-0
Fig. 742, Angle, Steel spindle	2.70	2.90	3.50	4.40	6.00
Wgt., lbs. and oz.	0-6	0-7	0-8	0-12	1-0
Fig. 743, Globe, Bronze spindle	2.40	2.50	2.80	3.50	5.00
Wgt., lbs. and oz.	0-6	0-7	0-7	0-12	1-0
Fig. 744, Angle, Bronze spindle	2.50	2.65	3.00	3.80	5.40
Wgt., lbs. and oz.	0-6	0-7	0-8	0-12	1-0

Dimensions, Inches

Sizes	1/8	1/4	3/8	1/2	3/4
Globe, face to face	1 5/8	1 11/16	1 13/16	2 1/8	2 7/16
Angle, centre to face	3/4	7/8	1	1 1/16	1 3/16
Globe, centre to top of hand wheel, open	2 15/16	3	3 1/16	3 13/16	3 7/8
Angle, centre to top of hand wheel, open	2 15/16	3	2 15/16	3 13/16	3 3/4
Diameter of hand wheel	1 3/4	1 3/4	1 3/4	2 1/16	2 1/16
Seat opening	3/64	1/16	3/32	1/8	3/16

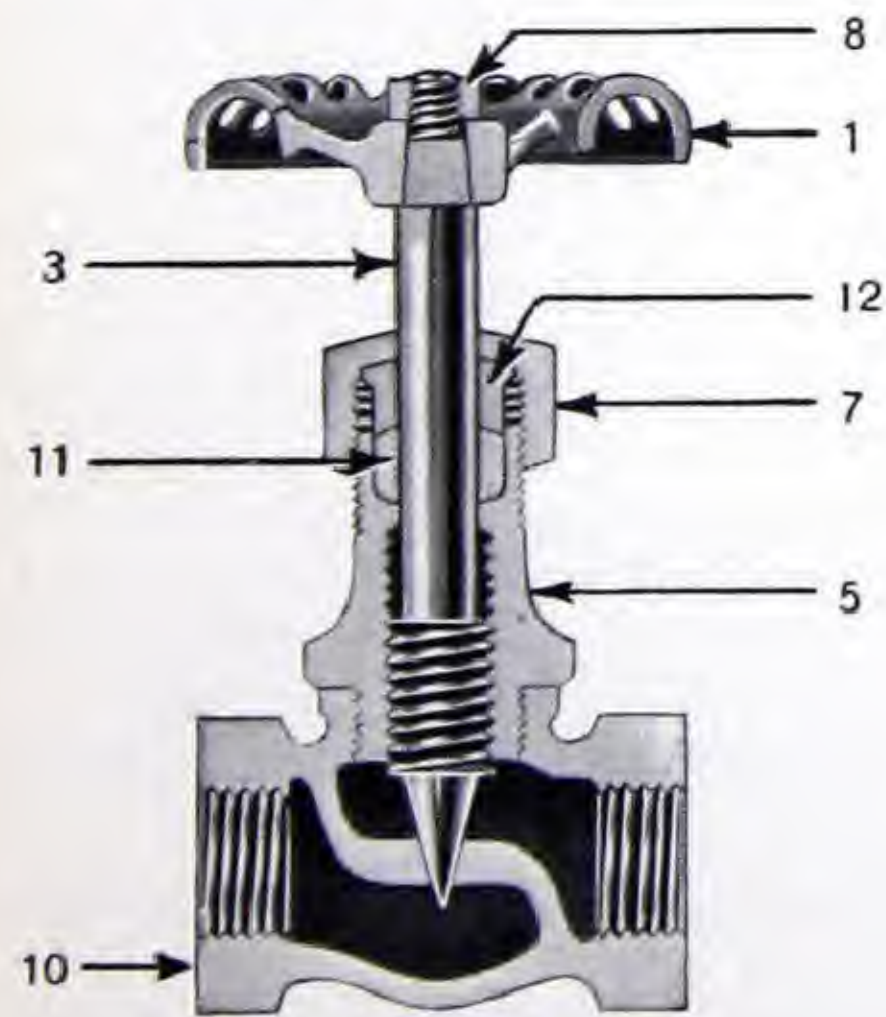


Fig. 743  
Sectional View

Description of Parts

- 1. Wheel, malleable iron, enamelled green.
- 3. Spindle, manganese bronze or steel.
- 5. Bonnet, one-piece, bronze.
- 7. Packing Nut, generously proportioned.
- 8. Wheel Nut.
- 10. Body, passages designed to permit full flow with least possible resistance.
- 11. Packing, large quantity of asbestos ring packing giving great durability.
- 12. Gland, compresses packing and holds it tight against the spindle.



# JENKINS BRONZE VALVES

## PLUG, GLOBE AND ANGLE

Standard Pattern

Bronze Spindle



Fig. 508  
Globe  
Bronze Spindle  
Code: ABVUD

For 200 Pounds Oil, Water, Gas  
Working Pressure

Designed along the same lines as the needle valve on opposite page, the disc, however, which is cast solid with the spindle, is of plug type with a much larger seat opening and consequently can not be so closely regulated as the needle valve.



Fig. 509  
Angle  
Bronze Spindle  
Code: ABVUE

Sizes.....	$\frac{1}{4}$	$\frac{3}{8}$
Figure 508.....	2.50	2.80
Wgt., lbs. and oz.....	0-7	0-7
Figure 509.....	2.65	3.00
Wgt., lbs. and oz.....	0-7	0-7

### Dimensions, Inches

Sizes.....	$\frac{1}{4}$	$\frac{3}{8}$
Globe, face to face.....	$1\frac{11}{16}$	$1\frac{11}{16}$
Angle, centre to face.....	$\frac{7}{8}$	$\frac{7}{8}$
Globe, centre to top of hand wheel, open.....	$2\frac{3}{4}$	$2\frac{3}{4}$
Angle, centre to top of hand wheel, open.....	$2\frac{7}{8}$	$2\frac{7}{8}$
Diameter of hand wheel.....	$1\frac{3}{4}$	$1\frac{3}{4}$
Seat opening.....	$\frac{3}{8}$	$\frac{3}{8}$

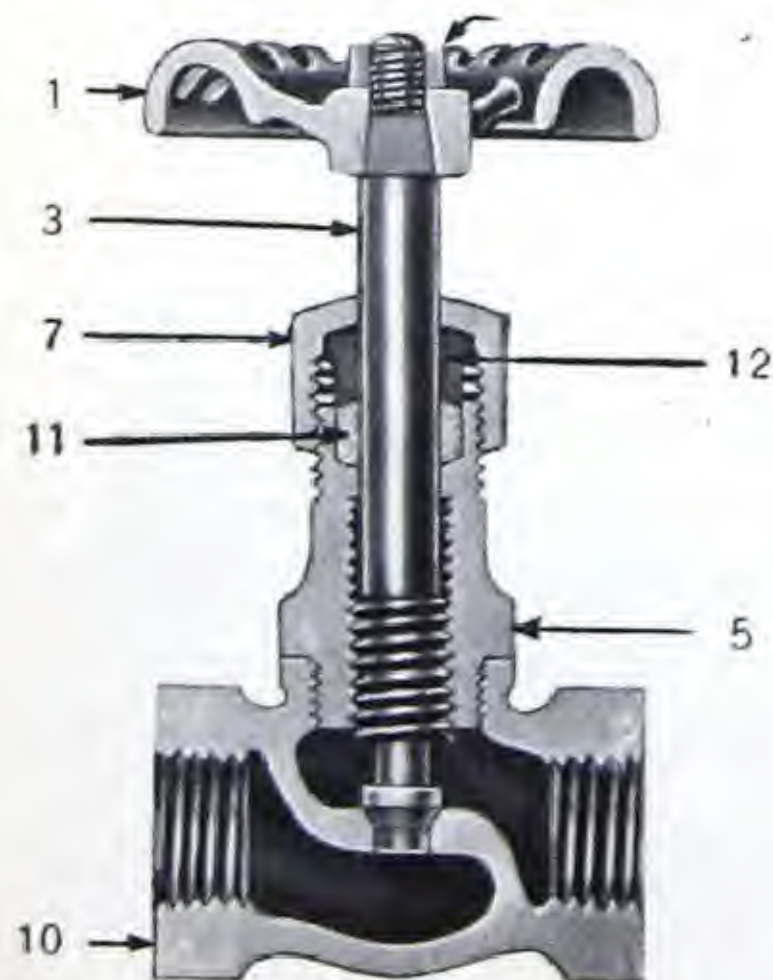


Fig. 508  
Sectional View

### Description of Parts

1. Wheel, malleable iron, enamelled green.
3. Spindle, manganese bronze.
5. Bonnet, one-piece, bronze.
7. Packing Nut, generously proportioned.
8. Wheel Nut.
10. Body, passages designed to permit full flow with least possible resistance.
11. Packing, large quantity of asbestos ring packing giving great durability.
12. Gland, compresses packing and holds it tight against the spindle.



J E N K I N S   B R O N Z E   V A L V E S

SPRING LOADED HORIZONTAL CHECK (Patent app. for)  
For Air Compressor Service Standard Pattern

Designed to meet the requirements of severe service up to 250 pounds pressure

Conforming to Canadian Interprovincial Specifications  
Registration Number 01027-123456



Fig. 55  
Sectional View



Fig. 55  
Horizontal, Screwed  
Code: ABTJE

The disc operates in a cage or chamber and is of steel. It is carefully machined, ground and lapped in the seat, insuring tight closure. A light spring loads the disc. Due to the limited lift and precision machining of all parts, these check valves are practically noiseless. For continuous service, they are unexcelled. This valve can also be supplied with disc holder and Jenkins renewable disc, see page 60.

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 55.....	2.40	2.40	2.60	3.00	4.00	5.30	7.50	10.00	18.50	28.00
Wgt., lbs. and oz.....	0-9	0-11	1-1	1-12	2-8	3-7	5-1	8-14	14-0	22-0

Dimensions, Inches

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed.....	2 1/8	2 3/8	2 3/4	3 5/16	3 13/16	4 1/4	4 7/8	5 3/4	6 5/8	8 1/2
Centre of body to top of cap..	1 3/8	1 3/8	1 1/16	1 13/16	1 15/16	2 1/8	2 7/16	2 15/16	3 3/8	3 13/16



# JENKINS BRONZE VALVES

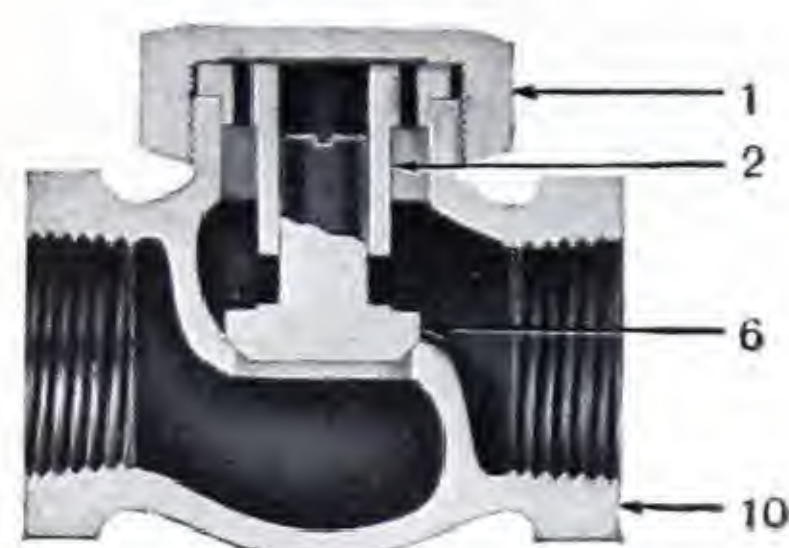
## HORIZONTAL AND ANGLE CHECKS

### Reliance or Medium Pressure Pattern

For 200 Pounds Steam or 300 Pounds Non-Shock Oil, Water,  
Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0243-123456 and 0244-123456



**Fig. 443**  
Sectional View  
Horizontal Screwed  
Code: ABVNF

**Fig. 445**  
Angle, Screwed  
Code: ABVNJ  
(not illustrated)

**Fig. 446**  
Angle, Flanged  
Code: ABVNL  
(not illustrated)



**Fig. 444**  
Horizontal, Flanged  
Code: ABVNH

#### Description of Parts

1. Cap.      2. Guide Collar.      6. Disc.      10. Body.

Jenkins Regrinding Check Valves are built to withstand long service.

Accurate alignment and guidance of parts makes possible, tight seating. Regrinding is a matter of simplicity, by the removal of the cap and inserting a screw-driver in slot provided, and proceeding in the usual way.

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 443.....	1.15	1.35	1.70	2.25	3.15	4.50	6.30	9.90	18.00	26.00
Wgt., lbs. and oz.....	0-8	0-9	0-13	1-5	2-0	3-1	4-2	7-6	10-7	18-1
Fig. 444.....			4.00	5.00	7.00	10.00	13.00	18.00	30.00	43.00
Wgt., lbs. and oz.....			2-4	3-5	4-13	6-11	9-0	16-0	21-2	30-0
Fig. 445.....	1.15	1.35	1.70	2.25	3.15	4.50	6.30	9.90	18.00	26.00
Wgt., lbs. and oz.....	0-8	0-9	0-14	1-6	2-1	3-3	4-4	7-8	11-0	18-4
Fig. 446.....			4.00	5.00	7.00	10.00	13.00	18.00	30.00	43.00
Wgt., lbs. and oz.....			2-5	3-6	4-14	6-13	9-2	16-2	21-4	30-3

#### Dimensions, Inches

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Horizontal, face to face, screwed.....	2 1/16	2 1/8	2 3/8	2 15/16	3 3/8	3 7/8	4 3/8	5 3/8	6 3/8	7 1/2
Angle, centre to face, screwed.....	1 1/32	1 1/16	1 3/16	1 7/16	1 11/16	1 15/16	2 3/16	2 11/16	3 5/16	3 3/4
Horizontal, face to face, flanged.....	2 7/8	2 7/8	3 5/8	4 1/8	4 5/8	5	5 7/8	6 7/8	7	8 1/2
Angle, centre to face, flanged.....	1 5/8	1 5/8	2 1/4	2 7/16	2 1/2	2 7/8	3 1/8	3 5/8	4 1/4	4 1/2
Diameter of flanges.....	2 1/2	2 1/2	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges.....	9/32	9/32	5/16	11/32	3/8	13/32	7/16	1/2	9/16	5/8
Horizontal, centre to top of cap.....	1 1/8	1 1/8	1 1/4	1 5/8	1 3/4	1 15/16	2 5/16	2 5/8	3	3 9/16
Angle, centre to top of cap.....	1 1/8	1 1/8	1 1/4	1 9/16	1 11/16	1 15/16	2 5/16	2 5/8	3 1/16	3 1/2



J E N K I N S   B R O N Z E   V A L V E S

VERTICAL CHECK  
Reliance or Medium Pressure Pattern

For 200 Pounds Steam or 300 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

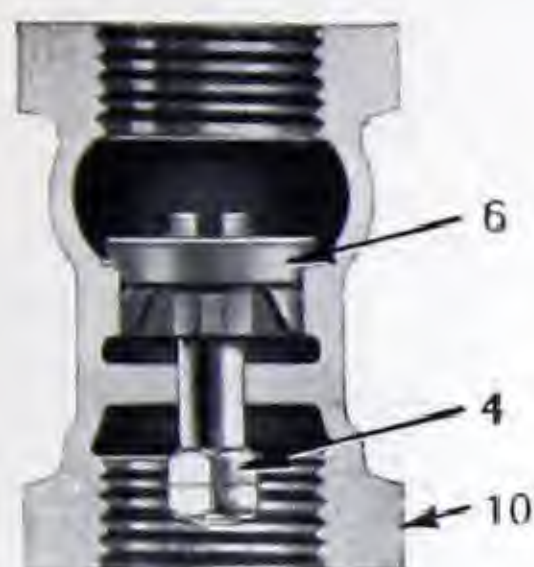


Fig. 447  
Sectional View  
Vertical, Screwed  
Code: ABVNP



Fig. 448  
Vertical, Flanged  
Code: ABVNR

Description of Parts

4. Disc Nuts.      6. Disc.      10 Body

Jenkins Regrinding Vertical Check Valves are built to withstand long service. Accurate alignment and tight seating are made possible due to the close tolerances to which the disc and guides are made. The disc is slotted for screw-driver, for regrinding.

Sizes .....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 447 .....	1.15	1.35	1.70	2.25	3.15	4.50	6.30	9.90	18.00	26.00
Wgt., lbs. and oz. ....	0-3	0-5	0-8	0-11	1-2	1-13	2-8	4-11	7-6	12-6
Fig. 448 .....			4.00	5.00	7.00	10.00	13.00	18.00	30.00	43.00
Wgt., lbs. and oz. ....			2-4	3-3	4-13	7-1	9-8	14-6	23-15	29-14

Dimensions, Inches

Sizes .....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed .....	1 3/4	1 15/16	2 3/16	2 9/16	3	3 5/16	3 3/4	4 11/16	5 5/16	6 7/32
Face to face, flanged .....			2 3/16	2 9/16	3	3 5/16	3 3/4	4 11/16	5 5/16	6 7/32
Diameter of flanges .....			3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges .....			5/16	11/32	3/8	13/32	7/16	1/2	9/16	5/8



# JENKINS BRONZE VALVES

## SWING CHECKS

### Reliance or Medium Pressure Pattern

For 200 Pounds Steam or 300 Pounds Non-Shock Oil, Water,  
Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0217-123456



**Fig. 449**  
Swing Check, Screwed  
Code: ABVNT



**Fig. 449**  
Sectional View



**Fig. 450**  
Swing Check, Flanged  
Code: ABVNU

Jenkins Regrinding Bronze Swing Check Valves can be installed on either an horizontal or vertical pipe line. In either location, accurate alignment and tight seating are made possible due to the close tolerances to which the disc and arm assembly is made.

Disc is strong and heavy to withstand the sudden shocks experienced in service. It is machined to a smooth finish, assuring a leak-proof contact.

The disc nut, securely pinned to the disc, cannot become loose.

All parts are made to limit gauges and are interchangeable.

The valve can be reground without removal from the line by inserting a screw driver through the opening in the body, provided for this purpose, into a generous slot cut in the end of the disc and proceeding in the usual way.

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 449.....	2.50	2.50	2.75	3.10	4.00	5.50	7.00	10.00	19.00	27.00
Wgt., lbs. and oz.....	0-9	0-9	0-12	1-3	1-15	3-0	3-13	6-9	10-13	14-15
Fig. 450.....			9.00	10.00	12.50	17.00	21.00	35.00	50.00	65.00
Wgt., lbs. and oz.....			2-2	3-0	4-9	6-12	8-13	12-3	23-4	32-8

### List Prices of Parts

Part No.....	Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Cap.....		.60	.60	.60	.65	.90	1.20	1.60	2.10	4.00	5.05
4. Hanger.....		.30	.30	.30	.35	.40	.50	.60	.65	1.55	1.75
5. Hanger Nut.....		.05	.05	.05	.05	.05	.05	.05	.10	.10	.15
6. Disc (regrinding).....		.30	.30	.35	.40	.50	.75	1.00	1.45	3.40	4.65
7. Pin.....		.05	.05	.05	.05	.05	.05	.05	.10	.15	.20
12. Stop Plug.....		.05	.05	.10	.10	.10	.15	.15	.20	.25	.25
13. Side Plugs, Pair.....		.05	.05	.10	.10	.15	.20	.20	.25	.35	.50

### Dimensions, Inches

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed.....	2 7/32	2 7/32	2 7/16	2 13/16	3 5/16	3 7/8	4 1/4	5 1/4	6 3/16	6 11/16
Face to face, flanged.....			3 7/8	4 3/8	5	5 5/8	6 1/8	7 3/8	8 3/8	9
Diameter of flanges.....			3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges.....			5/16	11/32	3/8	13/32	7/16	1/2	3/16	5/8
Centre to top of cap.....	1 9/16	1 9/16	1 5/8	1 15/16	2 1/4	2 7/16	2 5/8	3 5/16	3 7/8	4



J E N K I N S   B R O N Z E   V A L V E S

CUSHIONED CHECK VALVE  
Hard Bronze—Regrinding

Screwed: For 300 Pounds Steam or 500 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

Flanged: For 250 Pounds Steam or 375 Pounds Non-Shock Oil, Water,  
Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 01056-123456



Fig. 516  
Sectional View

Fig. 517  
Flanged  
Code: ABVUN  
(not illustrated)



Fig. 516  
Screwed  
Code: ABVUM

Flanged end Valves are not stocked, but can be supplied on short notice.

The Disc, Guide and Piston is one piece and made of Jenkins **WEARERESIST** Metal. The disc can be easily reground. Noise and pounding is practically eliminated by the cushion action of the piston in opening and closing.

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 516.....	.....Prices on application.....							
Wgt., lbs. and oz.....	1-3	1-14	3-0	4-1	5-8	9-15	15-2	24-3
Fig. 517.....	.....Prices on application.....							
Wgt., lbs. and oz.....	3-10	6-2	8-1	10-9	14-14	21-0	31-0	40-0

Dimensions, Inches

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed.....	2 1/2	2 15/16	3 1/2	4 1/16	4 3/4	5 3/4	7	8
Centre to top of cap.....	1 5/8	1 7/8	2 1/8	2 7/16	2 11/16	3 1/4	3 15/16	4 5/8



# JENKINS BRONZE VALVES

## HORIZONTAL AND ANGLE CHECK

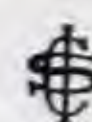
Sterling—Extra Heavy Pattern—Renewable Seat Ring

Screwed: For 300 Pounds Steam or 500 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

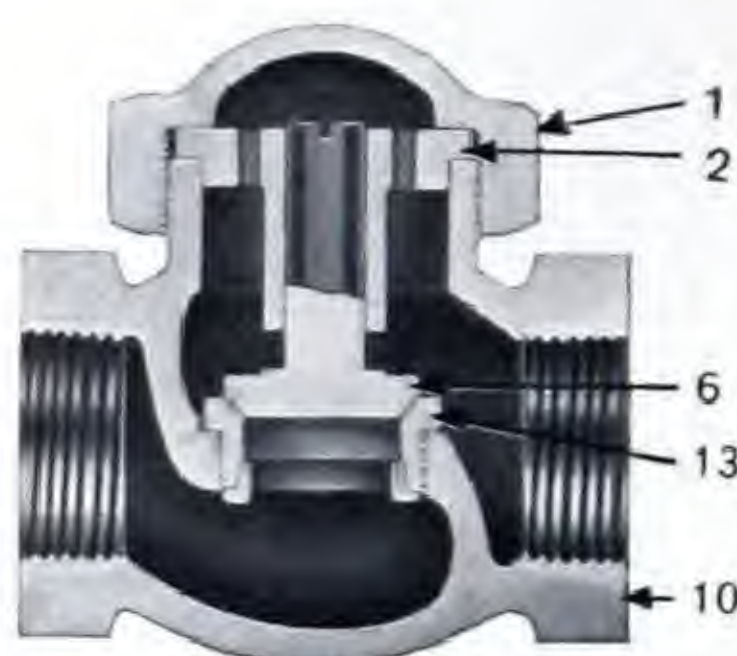
Flanged: For 250 Pounds Steam or 375 Pounds Non-Shock Oil, Water,  
Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0241-123456 and 0242-123456



**Fig. 518**  
Horizontal, Screwed  
Code: ABVUP



**Fig. 518**  
Sectional View



**Fig. 520**  
Angle, Screwed  
Code: ABVUS

**Fig. 519**  
Horizontal, Flanged  
Code: ABVUR

**Fig. 521**  
Angle, Flanged  
Code: ABVUT

### Description of Parts

- |                  |           |
|------------------|-----------|
| 1. Cap.          | 6. Disc.  |
| 2. Guide Collar. | 10. Body. |
| 13. Seat Ring.   |           |

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 518.....	2.50	2.50	3.00	3.50	4.50	5.50	7.75	11.50	21.00	30.00
Wgt., lbs. and oz.....	1-1	0-15	1-10	2-7	3-11	5-6	8-0	13-8	21-12	31-5
Fig. 519.....			5.00	6.50	8.50	10.50	14.25	20.00	31.00	42.00
Wgt., lbs. and oz.....			4-0	5-9	7-11	10-15	18-2	23-6	35-15	47-13
Fig. 520.....	2.50	2.50	3.00	3.50	4.50	5.50	7.75	11.50	21.00	30.00
Wgt., lbs. and oz.....	1-0	0-14	1-8	2-3	3-8	5-5	7-10	13-5	21-0	29-6
Fig. 521.....			5.00	6.50	8.50	10.50	14.25	20.00	31.00	42.00
Wgt., lbs. and oz.....			4-13	5-13	7-7	12-6	17-0	24-0	34-1	52-6

### Dimensions, Inches

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Horizontal, face to face screwed.....	2 3/8	2 3/8	2 3/4	3 1/4	3 3/4	4 3/8	5	6 1/8	7 1/4	8 3/8
Angle, centre to face screwed.....	1 3/16	1 3/16	1 3/8	1 5/8	1 7/8	2 3/16	2 1/2	3 1/16	3 5/8	4 3/16
Horizontal, face to face flanged.....	3 3/8	3 3/8	4	4 3/4	5 1/2	6	7	8	9	10
Angle, centre to face flanged.....	2 1/8	2 1/8	2 3/8	2 7/8	3	3 1/4	3 3/4	4 1/4	4 3/4	5 1/8
Diameter of flanges.....	3	3	3 3/4	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4
Thickness of flanges.....	3/8	3/8	13/32	7/16	1/2	17/32	9/16	5/8	11/16	3/4
Horizontal, centre to top of cap.....	1 3/4	1 3/4	2 7/32	2 7/32	2 19/32	2 7/8	3 13/32	3 11/16	4 3/8	5 1/16
Angle, centre to top of cap.....	1 3/4	1 3/4	1 31/32	2 5/32	2 15/32	2 3/4	3 7/32	3 9/16	4 3/8	5 1/16



AUTOMATIC  
FUSIBLE PLUG SHUT-OFF



Fig. 512  
Code: ABVUH

- Description of Parts
- 1. Cap.
  - 3. Spindle.
  - 6. Disc.
  - 7. Spring.
  - 8. Fusible Plug.
  - 9. Safety Cap.
  - 10. Body.
  - 11. Packing.
  - 12. Packing Nut.

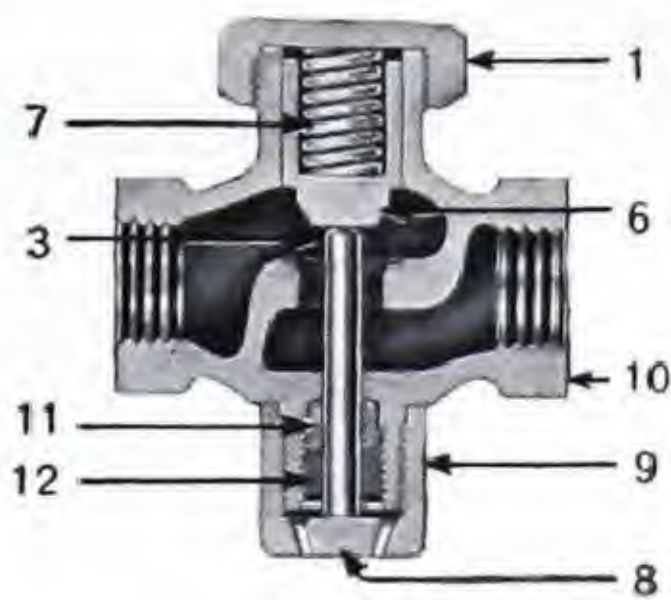


Fig. 512  
Sectional View

These Valves were specially designed as a safety device for use on Oil Burners between the source of supply and the burner. They can be used in any place where there is a possibility of overheating or a danger of fire and where the fluid or gas would be an added menace were it not immediately controlled. In the event of overheating, or fire, the fusible metal melts upon attaining a temperature of 160° F., releasing a plug which is forced out by a spring loaded spindle and disc, the valve closing automatically, shutting off the supply. Tests have proven this safety device to be absolutely dependable. The fusible plug is contained in a bronze cap which screws on the valve body and can be replaced without difficulty and at a small cost.

The packing and packing nut at spindle prevents leakage of fluid.

We strongly advise the installation of these Valves on the supply lines of any inflammable fluids.

Price on Application	
Size .....	3/8
Weight, lbs. and oz. ....	0-9



# J E N K I N S   B R O N Z E   V A L V E S

## ROCK-DRILL

250 Pounds Water Pressure  
Atmospheric Temperature



**Fig. 499**  
Metal Seat Type  
Sectional View  
Code: ABVTK



**Fig. 499-D**  
With Fibre Seat  
Code: ABVTL

These sturdy little valves were designed particularly for controlling the flow of water at 250 pounds pressure, atmospheric temperature.

They are particularly adaptable for use on the water-liner type of rock drills, for controlling the flow of water from the source of supply to the hollow bit for saturating the pulverized drillings.

An arrow cast on the body indicates the direction of flow and the valve should be installed with the water flow toward the drill.

When ordering specify figure number to designate type of seat required.

Sizes .....	$\frac{1}{4}$	$\frac{3}{8}$
Fig. 499 .....	<b>1.25</b>	<b>1.25</b>
Fig. 499-D .....	<b>1.25</b>	<b>1.25</b>
Wgt., lbs. and oz., Fig. 499 and Fig. 499-D .....	0-14 $\frac{1}{2}$	0-14

### Dimensions, Inches

Sizes .....	$\frac{1}{4}$	$\frac{3}{8}$
Face to face .....	2 $\frac{1}{4}$	2 $\frac{1}{4}$
Centre to top of handle, when open .....	2 $\frac{3}{8}$	2 $\frac{3}{8}$
Length of tee handle .....	2 $\frac{1}{4}$	2 $\frac{1}{4}$



JENKINS  
BRONZE GATE VALVES

•

Pages 93 to 115 inclusive



## GATE PATTERNS

Valves Listed on Pages 93 to 115.

**A**LL Jenkins Standard Bronze Gate Valves, listed in this section, are of the tapered double disc type. All Medium and Extra Heavy are of the tapered solid wedge type. They are made of Jenkins high grade bronze, carefully machined, finished and tested. In service these valves have demonstrated the advantages of Jenkins design and workmanship.

The bodies are liberally proportioned, uniform in thickness and have unrestricted passages permitting full flow. Tapped ends have full-length pipe threads tapped to either English or American Standard as required. Ample clearance between the last thread and seat diaphragm is allowed, which prevents pipe from striking or distorting it.

Guidance of the discs in the body prevents chattering when partially open. The discs are neatly fitted and precisely machined to prevent contact until at the final point of closing.

Full thread engagement with the spindle when the valve is closed, is provided. (*As the thrust is greatest at moment of closing, this feature adds to the life of these parts.*)

The collar of the Non-Rising Spindle is large in diameter with ample bearing surfaces to resist thrust-wear and liberal in thickness to prevent shearing. On all types, Rising Spindle, Non-Rising Spindle and Outside Screw and Yoke, special backseating arrangements allow valves to be repacked

under pressure when in either open or closed positions.

The spindles are of manganese bronze possessing great tensile and torsional strength; are dense in structure and have exceptional wear-resisting qualities.

The bonnets are liberal in diameter and height, permitting the discs to rise fully without any obstruction to the line of flow. In Non-Rising Spindle Patterns, the top face of the bonnet is perfectly machined for tightness at stuffing box joint. The stuffing box is exceptionally large in diameter and depth, contains a sufficient quantity of lubricated asbestos packing of highest quality to make a tight box with the least friction. Use of a gland with long shank compresses the packing for long periods before additional packing may be required.

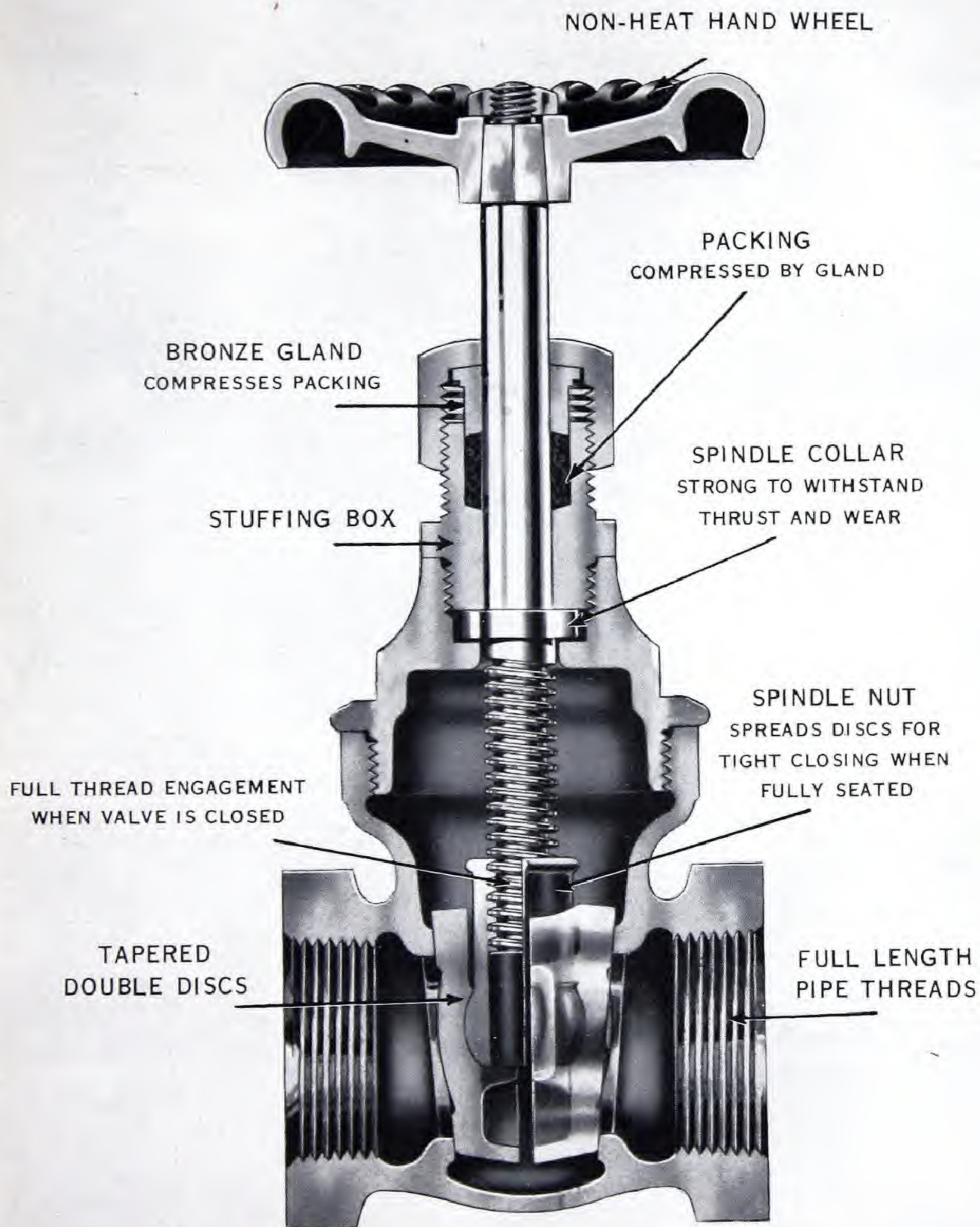
In Rising Spindle Patterns, the stuffing box is also large, holding ample packing, requiring less renewal.

In *Outside Screw* and *Yoke* Patterns, the stuffing box is equally large, thereby permitting tightness around spindle without excessive tightening of gland nuts. A gland of the flange type is used on all sizes to compress the packing and is secured by bronze studs and nuts. Yoke arms are T-sectioned and cast integral with bonnet and hub. *The height of the yoke is sufficiently liberal to prevent the spindle threads from shearing or cutting the packing material, even when the valve is fully closed.*



FIG. 300

STANDARD BRONZE GATE VALVE  
NON-RISING SPINDLE



ADDITIONAL INFORMATION LISTED ON FOLLOWING PAGES



# JENKINS BRONZE VALVES

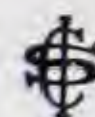
## GATE

### Standard Pattern—Non-Rising Spindle

For 125 Pounds Steam Working Pressure  
or 200 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0203-123456



**Fig. 300**  
Gate, Screwed  
Code: ABUWM

These Jenkins Gate Valves have globe-shaped bodies and tapered double discs. The discs are carried on a spindle nut, which allows a certain amount of flexibility, permitting the discs to seat perfectly. In opening, the first movement of the spindle loosens the discs, the guides remove them from the seat faces.



**Fig. 301**  
Gate, Flanged  
Code: ABUWR

Sizes.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 300.....	1.45	1.45	1.65	2.05	2.80	3.70	5.00	7.30	13.00	19.00
Wgt., lbs. and oz.....	0-13	0-12	1-4	1-10	2-10	3-15	5-11	7-15	14-0	24-3
Fig. 301.....			9.00	9.00	10.25	12.00	15.00	25.00	33.00	39.00
Wgt., lbs. and oz.....			2-15	4-2	6-3	8-0	10-10	16-4	26-8	35-9

### Dimensions, Inches

Sizes.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Face to face, screwed..	$2\frac{1}{16}$	$2\frac{1}{16}$	$2\frac{5}{16}$	$2\frac{1}{2}$	3	$3\frac{1}{4}$	$3\frac{9}{16}$	$3\frac{1}{2}$	$4\frac{3}{8}$	$5\frac{7}{16}$
Face to face, flanged..	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{15}{16}$	$3\frac{3}{8}$	$3\frac{15}{16}$	$4\frac{1}{2}$	$4\frac{7}{8}$	$5\frac{3}{4}$	$6\frac{1}{2}$	$7\frac{3}{8}$
Diameter of flanges...	$2\frac{1}{2}$	$2\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{7}{8}$	$4\frac{1}{4}$	$4\frac{5}{8}$	5	6	7	$7\frac{1}{2}$
Thickness of flanges...	$\frac{9}{32}$	$\frac{9}{32}$	$\frac{5}{16}$	$\frac{11}{32}$	$\frac{3}{8}$	$\frac{13}{32}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$
Centre to top of hand wheel.....	$3\frac{11}{16}$	$3\frac{11}{16}$	$4\frac{5}{16}$	$4\frac{7}{8}$	$5\frac{15}{16}$	$6\frac{11}{16}$	$7\frac{9}{16}$	$8\frac{7}{8}$	$10\frac{3}{8}$	$11\frac{5}{16}$
Diameter of hand wheel.....	$2\frac{1}{16}$	$2\frac{1}{16}$	$2\frac{7}{16}$	$2\frac{7}{16}$	$2\frac{13}{16}$	3	$3\frac{7}{16}$	$4\frac{1}{8}$	5	5



J E N K I N S   B R O N Z E   V A L V E S

GATE

Standard Pattern—Non-Rising Spindle

For 125 Pounds Steam Working Pressure  
or 200 Pounds Oil, Water, Gas Working Pressure

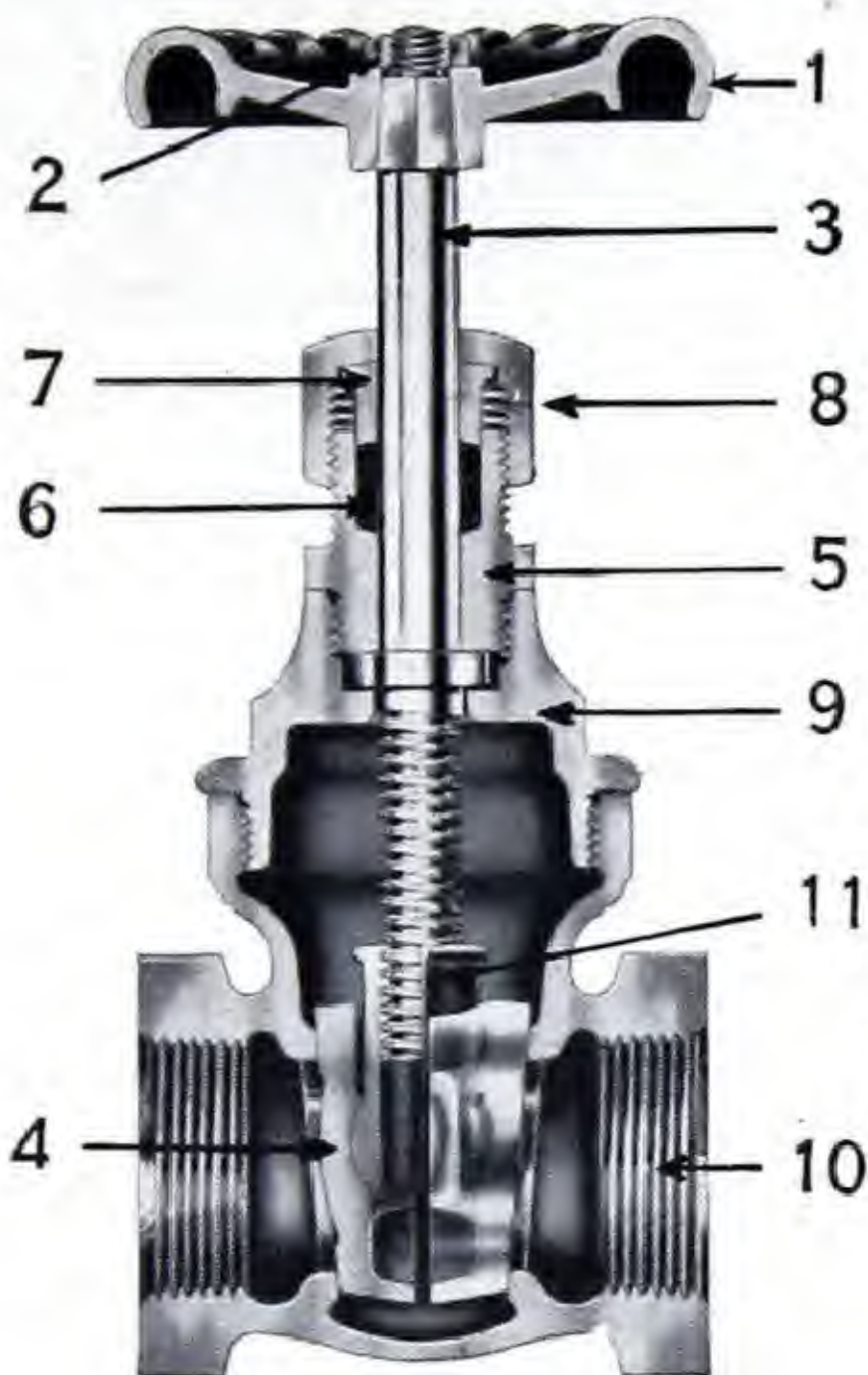


Fig. 300  
Sectional View

List Prices of Parts

Part No.....Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel.....	.10	.10	.10	.10	.15	.15	.25	.30	.35	.55
2. Wheel Nut.....	.04	.04	.04	.04	.04	.08	.10	.10	.20	.25
3. Spindle.....	.15	.15	.20	.30	.40	.45	.60	.85	1.50	2.00
4. Discs (pair).....	.30	.30	.30	.40	.50	.75	.90	1.70	2.50	3.50
5. Stuffing Box.....	.15	.15	.15	.25	.30	.35	.50	.65	.90	1.10
6. Packing.....	.05	.05	.05	.05	.05	.06	.06	.06	.06	.10
7. Gland.....	.06	.06	.06	.06	.06	.10	.12	.15	.25	.40
8. Packing Nut.....	.08	.10	.12	.20	.20	.25	.35	.40	.50	.85
9. Bonnet.....	.30	.30	.30	.45	.70	.85	1.35	1.95	3.50	4.50
11. Spindle Nut.....	.10	.10	.10	.15	.15	.15	.25	.35	.40	.50
T.C. Trimming Complete (all parts except body).....	1.00	1.00	1.10	1.35	1.85	2.50	3.35	4.85	8.65	12.65

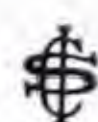


# JENKINS BRONZE VALVES

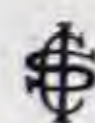
## GATE

### Standard Pattern—Outside Screw and Yoke

For 125 Pounds Steam Working Pressure  
or 200 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0204-123456



**Fig. 305**  
Gate, Screwed  
Code: ABUXL

These valves have globe-shaped body and tapered double discs. Guides cast in body prevent chattering when partially open and keep disc in line for perfect seating. When the valve is fully open, the disc is entirely lifted from the line of flow.

The rising spindle of this type of valve serves as an indicator. As the spindle threads are outside the valve, it is a simple and easy matter to lubricate and clean the spindle.



**Fig. 305a**  
Gate, Flanged  
Code: ABUXP

Sizes.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 305.....	7.50	8.50	9.70	12.00	16.30	25.00	40.50
Wgt., lbs. and oz.....	2-4	3-6	4-13	6-8	9-7	16-11	25-10
Fig. 305a.....	13.20	14.00	16.00	20.00	30.00	38.50	52.00
Wgt., lbs. and oz.....	4-12	6-11	8-11	11-7	17-10	25-14	37-4

### Dimensions, Inches

Sizes.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Face to face, screwed.....	$2\frac{1}{2}$	3	$3\frac{1}{4}$	$3\frac{9}{16}$	$3\frac{1}{2}$	$4\frac{3}{8}$	$5\frac{7}{16}$
Face to face, flanged.....	$3\frac{3}{8}$	$3\frac{15}{16}$	$4\frac{1}{2}$	$4\frac{7}{8}$	$5\frac{3}{4}$	$6\frac{1}{2}$	$7\frac{3}{8}$
Diameter of flanges.....	$3\frac{7}{8}$	$4\frac{1}{4}$	$4\frac{5}{8}$	5	6	7	$7\frac{1}{2}$
Thickness of flanges.....	$\frac{11}{32}$	$\frac{3}{8}$	$\frac{13}{32}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$
Centre to top of hand wheel.....	$4\frac{11}{16}$	$5\frac{5}{8}$	$6\frac{1}{2}$	$7\frac{1}{8}$	$8\frac{9}{16}$	$10\frac{3}{4}$	$11\frac{1}{2}$
Centre to top of spindle, open.....	$5\frac{11}{16}$	$6\frac{7}{8}$	$8\frac{1}{16}$	9	$11\frac{3}{16}$	$13\frac{7}{8}$	$15\frac{1}{4}$
Diameter of hand wheel.....	$3\frac{3}{16}$	$3\frac{5}{8}$	$3\frac{7}{8}$	$4\frac{1}{8}$	$4\frac{3}{8}$	5	$6\frac{1}{4}$



J E N K I N S   B R O N Z E   V A L V E S

GATE

Standard Pattern—Outside Screw and Yoke

For 125 Pounds Steam Working Pressure  
or 200 Pounds Oil, Water, Gas Working Pressure

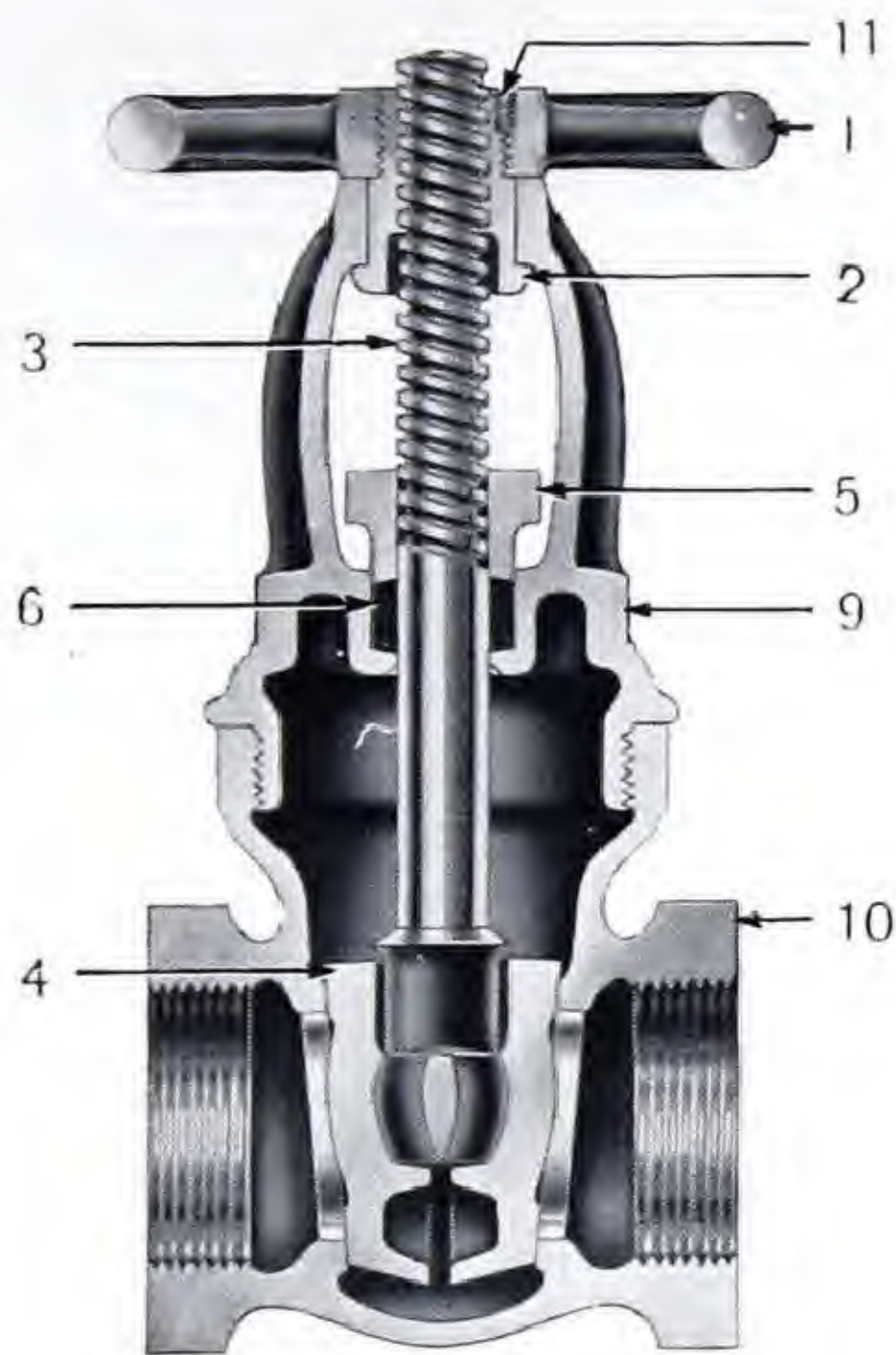


Fig. 305  
Sectional View

List Prices of Parts

Part No.....Sizes	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel.....	.70	.70	.75	.88	.95	1.00	1.75
2. Yoke Nut.....	.70	.75	.80	.88	1.10	1.20	1.60
3. Spindle and spindle nut (combined).....	.75	.80	.85	1.25	1.65	2.10	3.55
4. Discs (pair).....	.85	.95	1.00	1.20	1.85	2.50	4.55
5. Gland.....	.95	.95	.95	.95	1.10	1.20	1.70
6. Packing.....	.05	.06	.06	.06	.06	.10	.10
7. Gland Studs (Bronze).....	.33	.33	.33	.38	.44	.48	.55
8. Gland Nuts (Bronze).....							
9. Bonnet.....	2.50	2.55	2.65	3.40	4.15	6.10	12.20
11. Wheel Screw.....	.04	.04	.04	.05	.05	.05	.05



## GATE Underwriters Pattern—Outside Screw and Yoke

For 150 Pounds Water Working Pressure



**Fig. 305-U**  
Gate, Screwed  
Code: ABUXT

Made in accordance with the specifications of the National Board of Fire Underwriters, Associated Factory Mutual Fire Insurance Companies and the National Fire Protection Association.

The bonnet yokes are provided with the customary Associated Factory Mutual Fire Insurance Companies' "FM", and Underwriters' "JU" and the figures "150".

These Jenkins Underwriters' Pattern Gate Valves have globe-shaped body and tapered double discs. Guides cast in body prevent chattering when partially open and keep the disc in line for perfect seating. When fully opened, the disc is entirely lifted from the line of flow.



**Fig. 305-U**  
Sectional View

Sizes.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Fig. 305-U.....	<b>8.75</b>	<b>10.25</b>	<b>12.00</b>	<b>15.00</b>	<b>22.00</b>
Wgt., lbs. and oz.....	2-4	3-6	4-13	6-8	9-7

### Dimensions, Inches

Sizes.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Face to face, screwed.....	$2\frac{1}{2}$	3	$3\frac{1}{4}$	$3\frac{9}{16}$	$3\frac{1}{2}$
Centre to top of hand wheel.....	$4\frac{11}{16}$	$5\frac{5}{8}$	$6\frac{1}{2}$	$7\frac{1}{8}$	$8\frac{9}{16}$
Centre to top of spindle, open.....	$5\frac{11}{16}$	$6\frac{7}{8}$	$8\frac{1}{16}$	9	$11\frac{3}{16}$
Diameter of hand wheel.....	$3\frac{3}{16}$	$3\frac{5}{8}$	$3\frac{7}{8}$	$4\frac{1}{8}$	$4\frac{3}{8}$

Prices of Parts are same as shown on page 97



J E N K I N S    B R O N Z E    V A L V E S

GATE

Standard Pattern—Rising Spindle

For 125 Pounds Steam Working Pressure  
or 200 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial  
Specifications.      Registration Number  
0136-123456



Jenkins Rising Spindle Gate Valves have globe-shaped bodies and tapered double discs of an improved ball and socket type. Guides carry the discs to and from the body seats without drag. The bonnet is of one piece and exceptionally strong, back-seating arrangement allows repacking under pressure.



Fig. 470  
Gate, Screwed  
Code: ABVPY



Fig. 470  
Sectional View

Fig. 471  
Gate, Flanged  
Code: ABVRC  
(not illustrated)

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 470.....	1.45	1.45	1.65	2.05	2.80	3.70	5.00	7.30	13.00	19.00
Wgt., lbs. and oz.....	0-11	0-10	0-15	1-9	2-4	3-7	5-2	7-9	12-13	22-0
Fig. 471.....			9.00	9.00	10.25	12.00	15.00	25.00	33.00	39.00
Wgt., lbs. and oz.....			2-15	4-1	5-15	7-8	10-1	15-14	25-5	34-0

List Prices of Parts

Part No.....	Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel.....		.10	.10	.10	.10	.15	.15	.25	.30	.35	.55
2. Wheel Nut.....		.04	.04	.04	.04	.04	.08	.10	.10	.20	.25
3. Spindle.....		.15	.15	.20	.30	.40	.45	.60	.85	1.50	2.00
4. Discs (pair).....		.30	.30	.30	.40	.50	.75	.90	1.70	2.50	3.50
7. Gland.....		.06	.06	.06	.06	.06	.10	.12	.15	.25	.40
8. Packing Nut.....		.08	.10	.12	.20	.20	.25	.35	.40	.50	.85
9. Bonnet.....		.30	.30	.30	.45	.70	.85	1.35	1.95	3.50	4.50
Trimming complete (all parts except body).....		1.00	1.00	1.10	1.35	.185	2.50	3.35	4.85	8.65	12.65

Dimensions, Inches

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed.....	1 3/4	1 3/4	1 7/8	2 3/16	2 1/2	2 3/4	3	3 3/8	4	4 5/8
Face to face, flanged.....	3	3	3 1/4	4 1/4	4 7/8	5 1/2	6	7	6 1/2	7 3/8
Diameter of flanges.....	2 1/2	2 1/2	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Thickness of flanges.....	9/32	9/32	5/16	11/32	3/8	13/32	7/16	1/2	9/16	5/8
Centre to top of wheel, open....	4	4	4 5/8	5 13/16	6 15/16	8 1/16	9 5/8	11 13/16	14 1/8	16 5/8
Diameter of hand wheel.....	1 3/4	1 3/4	2 1/16	2 7/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5



# JENKINS BRONZE VALVES

## HOSE GATE



**Fig. 303**  
Gate, Hose End  
Iron Wheel  
Code: ABUXA

For 150 Pounds Water Working Pressure  
Screwed Inlet                      Hose Outlet

Bronze hose end gate valves have tapered double discs. The discs are carried on a spindle nut, which allows a certain amount of flexibility, permitting the discs to seat perfectly. Unless otherwise ordered, hose threads will be supplied as follows:  $\frac{1}{2}$ " and  $\frac{3}{4}$ " garden hose standard, 1" to 2" inclusive to iron pipe standard. On 2 $\frac{1}{2}$ " and 3" it will be necessary for customers to specify diameter and number of threads per inch, or preferably send sample hose coupling.

Iron pipe thread can also be supplied on  $\frac{1}{2}$ " and  $\frac{3}{4}$ " when desired.



**Fig. 304**  
Gate, Hose End  
Iron Wheel  
With Cap and Chain  
Code: ABUXH

### Without Cap and Chain

Finish No..... Sizes	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3
No. 11. Rough body, finished trimmings, iron wheel.....	2.45	2.45	3.35	4.70	6.25	9.00	15.00	22.00
No. 12. Rough body, finished trimmings, bronze wheel.....	3.70	3.70	5.20	6.85	8.85	12.30	18.70	27.30
No. 13. Finished all over, bronze wheel.....	5.20	5.20	6.90	9.10	11.85	17.30	26.00	38.00
No. 14. Rough body, nickel plated all over, bronze wheel....	4.20	4.20	5.80	7.55	9.65	13.30	19.95	29.00
No. 15. Finished and nickel plated all over, bronze wheel....	5.70	5.70	7.50	9.80	12.65	18.30	27.25	39.75
Wgt., lbs. and oz.....	1-3	1-8	2-7	3-11	5-7	7-11	15-3	26-0

### With Cap and Chain

Finish No..... Sizes	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3
No. 11. Rough body, finished trimmings, iron wheel.....	3.95	3.95	5.10	6.70	8.85	12.60	20.00	29.50
No. 12. Rough body, finished trimmings, bronze wheel.....	5.20	5.20	6.95	8.85	11.45	15.90	23.70	34.80
No. 13. Finished all over, bronze wheel.....	6.70	6.70	8.65	11.10	14.45	20.90	31.00	45.50
No. 14. Rough body, nickel plated all over, bronze wheel....	5.70	5.70	7.55	9.65	12.25	16.90	24.95	36.50
No. 15. Finished and nickel plated all over, bronze wheel....	7.20	7.20	9.25	11.80	15.25	21.90	32.25	47.25
Wgt., lbs. and oz.....	1-8	1-15	2-15	4-5	6-5	9-1	17-13	28-14

### Dimensions, Inches

Sizes.....	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3
Number of Threads per inch.....	11 $\frac{1}{2}$	11 $\frac{1}{2}$	11 $\frac{1}{2}$	11 $\frac{1}{2}$	11 $\frac{1}{2}$	11 $\frac{1}{2}$	*	*
Diameter of Threads.....	1 $\frac{1}{16}$	1 $\frac{1}{16}$	1 $\frac{5}{16}$	1 $\frac{21}{32}$	1 $\frac{29}{32}$	2 $\frac{3}{8}$	*	*
Centre to End of Threads.....	1 $\frac{1}{4}$	1 $\frac{7}{16}$	1 $\frac{23}{32}$	1 $\frac{15}{16}$	2	2 $\frac{1}{8}$	2 $\frac{5}{8}$	3 $\frac{5}{8}$
Centre to Face.....	1 $\frac{5}{32}$	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{5}{8}$	1 $\frac{25}{32}$	1 $\frac{3}{4}$	2 $\frac{3}{16}$	2 $\frac{23}{32}$
Centre to Top of Wheel.....	4 $\frac{1}{4}$	4 $\frac{7}{8}$	5 $\frac{15}{16}$	6 $\frac{11}{16}$	7 $\frac{9}{16}$	8 $\frac{7}{8}$	10 $\frac{3}{8}$	11 $\frac{5}{16}$
Diameter of Wheel.....	2 $\frac{7}{16}$	2 $\frac{7}{16}$	2 $\frac{13}{16}$	3	3 $\frac{7}{16}$	4 $\frac{1}{8}$	5	5

\*See valve description above.



J E N K I N S   B R O N Z E   V A L V E S

HOSE GATE  
Underwriters' Pattern

For 150 Pounds Water Working Pressure



Fig. 707  
With Boss Only  
Code: ABWMO

Made in accordance with the specifications of the Associated Factory Mutual Fire Insurance Company.

The bodies are provided with their customary "FM" cast on one side, and the Jenkins trade-mark and figures "150" on the other.

While the bodies are regularly supplied with a blind boss on the outlet end, between the disc and the hose thread, they are neither tapped nor fitted with a drip cock unless so ordered.

The hand wheels are enamelled a bright red and have the word "open" and an arrow cast on the top of the rim.

Valves can be supplied with cap and chain at additional cost.

The hose end of the valve is threaded with Montreal Standard threads, unless otherwise specified. The inlet end is threaded for standard iron pipe.

For threads of special diameter an additional charge will be made, and when so desired it is always necessary to send sample of a male end hose coupling to serve as a gauge.

Size.....	2½
Fig. 707.....	19.00
Wgt., lbs. and oz.....	15-4

Dimensions, Inches

Size.....	2½
Number of hose threads per inch.....	7
Diameter of hose threads.....	3.025
Centre to face, inlet.....	2⅜
Centre to face, outlet.....	2⅝
Centre to top of hand wheel.....	10
Diameter of hand wheel.....	5½



J E N K I N S   B R O N Z E   V A L V E S

HOSE GATE

For 150 Pounds Water Working Pressure  
Screwed Inlet                      Hose Outlet

Outside Screw and Yoke



Fig. 306  
Gate, Hose End  
Iron Wheel  
With Cap and Chain  
Code: ABUXU

Bronze hose end gate valves have tapered double discs. The discs are carried on a spindle nut, which allows a certain amount of flexibility, permitting the discs to seat perfectly.

Unless otherwise ordered hose threads will be supplied as follows: 3/4" garden hose standard, 1" to 2" inclusive, to iron pipe standard. On 2 1/2" and 3" it will be necessary for customers to specify diameter and number of threads per inch, or preferably send sample hose coupling.

3/4" can also be furnished with iron pipe thread on hose when desired.



Fig. 305b  
Gate, Hose End  
Iron Wheel  
Code: ABUXS

Sizes	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 306, with cap and chain	9.75	11.10	13.50	17.70	25.00	36.25	43.50
Wgt., lbs. and oz.	2-12	4-3	6-3	7-9	12-9	19-0	29-12
Fig. 305b, without cap and chain	9.00	10.50	12.25	16.25	23.25	34.50	41.50
Wgt., lbs. and oz.	2-0	3-4	4-11	6-4	9-3	16-2	25-2

Prices of Parts, see page 97.

Dimensions, Inches

Sizes	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Number of threads per inch	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	*	*
Diameter of threads	1 1/16	1 5/16	1 21/32	1 29/32	2 3/8	*	*
Centre to end of threads	1 7/16	1 23/32	1 15/16	2	2 1/8	2 5/8	3 5/8
Centre to face	1 1/4	1 1/2	1 5/8	1 25/32	1 3/4	2 3/16	2 23/32
Centre to top of wheel	4 11/16	5 5/8	6 1/2	7 1/8	8 9/16	10 3/4	11 1/2
Centre to top of spindle when open	5 11/16	6 7/8	8 1/16	9	11 3/16	13 7/8	15 1/4
Diameter of wheel	3 3/16	3 5/8	3 7/8	4 1/8	4 3/8	5	6 1/4

\*See Valve description above.



STREAMLINE GATE  
Non-Rising Spindle

Manufactured under Licence by Canada Wire and Cable Company.

For 125 Pounds Steam Working Pressure or 200 Pounds Oil, Water,  
Gas Working Pressure



Fig. 300-S  
Gate, Streamline  
Code: ABUWMS

These valves are exactly the same pattern as Jenkins Standard Bronze Gate Valves excepting that the pipe ends are for use on Streamline Copper pipe and fittings. When the solder is fed through the hole, the law of capillary attraction distributes it over the entire surface between the valve and pipe. When the solder appears around the end of the valve, all that is necessary is to put a drop of solder in the hole, making a perfect, leak-proof, vibration-proof joint.

Sizes . . . .	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 300-S	1.45	1.45	1.65	2.05	2.80	3.70	5.00	7.30	13.00	19.00
Wgt., lbs. and oz.	0-12	0-11	1-1	1-8	2-8	3-8	5-5	7-11	13-9	22-5

List price of Parts same as Fig. 300 listed on page 95.

Dimensions, Inches

Sizes . . . . .	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
End to end . . . . .	2 1/8	2 1/4	2 5/8	3 1/8	3 1/2	3 3/4	4	4 3/8	5 3/16	6 1/2
Depth of port . . . . .	9/16	1 1/16	1 3/16	1	1 1/16	1 1/8	1 3/16	1 3/8	1 5/8	1 7/8
Centre to top of hand-wheel . . . . .	3 11/16	3 11/16	4 5/16	4 7/8	5 15/16	6 11/16	7 9/16	8 7/8	10 3/8	11 5/16
Diameter of hand-wheel . . . . .	2 1/16	2 1/16	2 7/16	2 7/16	2 13/16	3	3 7/16	4 1/8	5	5

GATE  
QUICK-ACTING

For 125 Pounds Steam Working Pressure



Fig. 302  
Gate, Screwed  
Code: ABUWX

This Quick Acting Gate Valve was designed for use where conditions require quick on and off action, dependability and fully unobstructed flow. Particularly suitable for service in oil refineries, candy, canning and packing factories, pulp, paper and textile installations.

List Price and Weight

Size . . . . .	2
Fig. 302 . . . . .	11.80
Wgt., lbs. and oz. . . . .	7-11

Dimensions, Inches

Size . . . . .	2
Face to face, screwed . . . . .	3 1/2
Centre to top of cap . . . . .	3 15/16
Centre to end of lever . . . . .	10 1/16



# JENKINS BRONZE VALVES

## RADIATOR GATE With Fibre Composition Wheel



**Fig. 307**  
Gate, Screwed  
Code: ABUXY

These valves are of the same weight and design as Jenkins Standard Pattern Gate Valves. They can be furnished with screwed ends or with male or female union; also with diaphragm drilled for hot water service if required.



**Fig. 308**  
Gate, with Male Union  
Code: ABUYD

### List Prices, Fig. 307

Finish No. . . . . Sizes	3/8	1/2	3/4	1	1 1/4	1 1/2	2
1. Rough body, finished trimmings . . . . .	1.85	2.00	2.55	3.40	4.50	6.00	8.90
2. Finished all over . . . . .	3.15	3.30	4.00	5.10	6.75	9.00	13.90
3. Rough body, nickel-plated trimmings . . . . .	2.05	2.20	2.80	3.65	4.75	6.25	9.30
4. Rough body, nickel-plated all over . . . . .	2.25	2.40	3.00	3.85	5.00	6.60	9.65
5. Finished and nickel-plated all over . . . . .	3.55	3.70	4.50	5.60	7.35	9.70	14.80
Wgt., lbs. and oz. . . . .	0-13	1-5	1-11	2-12	4-0	5-12	8-0

Can also be supplied tapped left hand. Prices on application.

### List Prices, Fig. 308

Finish No. . . . . Sizes	3/8	1/2	3/4	1	1 1/4	1 1/2	2
6. Rough body, finished trimmings . . . . .	3.05	3.20	3.75	4.65	6.00	8.25	11.90
7. Finished all over . . . . .	4.30	4.45	5.25	6.35	8.25	11.25	16.90
8. Rough body, nickel-plated trimmings . . . . .	3.25	3.40	4.00	4.90	6.30	8.65	12.30
9. Rough body, nickel-plated all over . . . . .	3.50	3.65	4.25	5.20	6.60	9.00	12.80
10. Finished and nickel-plated all over . . . . .	4.75	4.90	5.75	7.00	9.00	12.00	17.90
Wgt., lbs. and oz. . . . .	0-15	1-7	2-1	3-3	4-12	6-11	9-3

Male unions with left hand threads can be supplied. Prices on application.

### Dimensions, Inches

Sizes . . . . .	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face, screwed . . . . .	2 1/16	2 5/16	2 1/2	3	3 1/4	3 9/16	3 1/2
Centre to top of hand wheel . . . . .	3 11/16	4 5/16	4 7/8	5 15/16	6 13/16	7 9/16	8 3/4
Diameter of hand wheel . . . . .	2 1/4	2 1/2	2 1/2	2 3/4	3	3 1/4	3 1/2
Centre to end of union . . . . .	2 1/8	2 7/16	2 25/32	3 3/16	3 1/2	3 11/16	4 1/16

List price of Parts same as for Fig. 300 listed on page 95.  
For wheel, see page 116. Price of union and nipple on application.



RADIATOR GATE  
With Lock Shield

These valves are of the same construction as Figs. 307 and 308 but are fitted with lock shield. They are for installation in public places or where a valve is liable to tampering. Furnished with Male or Female Union; also with diaphragm drilled for hot water service if required.



Fig. 307-A  
Gate, Screwed  
Code: ABUYB

Prices, Fig. 307-A  
Can also be supplied tapped left hand  
Prices on Application

Sizes.....	3/8	1/2	3/4	1	1 1/4	1 1/2	2
No. 1. Rough body, finished trimmings....	2.40	2.55	3.15	4.10	5.35	7.00	10.35
No. 2. Finished all over..	3.70	3.85	4.60	5.80	7.60	10.00	15.35
No. 3. Rough body, nickel-plated trimmings.....	2.70	2.85	3.50	4.50	5.75	7.45	11.00
No. 4. Rough body, nickel-plated all over..	2.90	3.05	3.70	4.70	6.00	7.80	11.35
No. 5. Finished and nickel-plated all over..	4.20	4.35	5.20	6.45	8.35	10.90	16.50
Wgt., lbs. and oz.....	0-11	1-1	1-8	2-8	3-11	5-6	7-9

Prices, Fig. 308-A  
Male Unions with left hand threads can be supplied  
Prices on Application



Fig. 308-A  
Gate, with Male Union  
Code: ABUYF

Sizes.....	3/8	1/2	3/4	1	1 1/4	1 1/2	2
No. 6. Rough body, finished trimmings....	3.60	3.75	4.35	5.35	6.85	9.25	13.35
No. 7. Finished all over..	4.85	5.00	5.85	7.05	9.10	12.25	18.35
No. 8. Rough body, nickel-plated trimmings.....	3.90	4.05	4.70	5.75	7.30	9.85	14.00
No. 9. Rough body, nickel-plated all over..	4.15	4.30	4.95	6.05	7.60	10.20	14.50
No. 10. Finished and nickel-plated all over..	5.40	5.55	6.45	7.85	10.00	13.20	19.60
Wgt., lbs. and oz.....	0-13	1-4	1-14	3-0	4-8	6-6	8-12

Dimensions, Inches

Sizes.....	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face, screwed...	2 1/16	2 5/16	2 1/2	3	3 1/4	3 9/16	3 1/2
Centre to top of shield..	3 5/16	3 11/16	4 1/4	5 5/16	6 1/16	6 15/16	7 3/4
Centre to end of union..	2 1/8	2 7/16	2 25/32	3 3/16	3 1/2	3 11/16	4 1/16

List price of Parts same as Fig. 300 on page 95.



Fig. 171  
Tee Handle Key  
Code: ABUEH

Sizes of Valves.....	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Fig. 171.....	.45	.45	.45	.60	.60	.80	.80
Number of Key.....	1	2	2	3	3	4	4
Size of Square.....	1/4	5/16	5/16	11/32	11/32	27/64	27/64
Wgt., oz.....	1 1/2	2 1/2	2 1/2	3 1/2	3 1/2	4 1/2	4 1/2



## RADIATOR GATE With Fibre Composition Wheel



**Fig. 355**  
Angle with Male Union  
Code: ABVCU

Bronze Angle Gate Valves are of the same design as Standard Pattern Gate Valves on page 94. Parts and prices are the same as on page 95. Angle pattern gate valves can also be supplied in other styles, including plain finish with iron hand wheels, or with hose thread with or without cap and chain.

**Prices on Application.**

**With Male Union, Right or Left Hand Threads,  
Fig. 355**

Finish No. . . . . Sizes	1/2	3/4	1	1 1/4	1 1/2	2
6. Rough body, finished trimmings. . . . .	3.90	4.65	5.80	7.25	9.30	13.40
7. Finished all over. . . . .	5.00	5.80	7.45	9.25	11.40	16.75
8. Rough body, nickel-plated trimmings. . . . .	4.15	4.95	6.15	7.65	9.75	14.00
9. Rough body, nickel-plated all over. . . . .	4.25	5.05	6.25	7.75	9.90	14.25
10. Finished and nickel-plated all over. . . . .	5.35	6.20	7.90	9.75	12.00	17.55
Wgt., lbs. and oz. . . . .	1-7	2-3	3-4	4-14	6-13	10-14

### Dimensions, Inches

Sizes. . . . .	1/2	3/4	1	1 1/4	1 1/2	2
Centre to face, screwed. . . . .	1 1/8	1 11/32	1 1/2	1 3/4	2	2 7/16
Centre to top of hand wheel. . . . .	4 5/16	4 7/8	5 15/16	6 13/16	7 9/16	8 3/4
Diameter of hand wheel. . . . .	2 1/2	2 1/2	2 3/4	3	3 1/4	3 1/2
Centre to end of union. . . . .	2 7/16	2 25/32	3 3/16	3 1/2	3 11/16	4 1/16
Centre of valve to centre of inlet. . . . .	1	1 3/16	1 3/8	1 9/16	1 15/16	2 1/8

List price of Parts same as for Fig. 300 listed on page 95.  
For wheel, see page 116. Price of union and nipple on application.



J E N K I N S   B R O N Z E   V A L V E S

GATE

Standard Pattern—Large Sizes

For 125 Pounds Steam Working Pressure  
or 200 Pounds Oil, Water, Gas Working Pressure



Fig. 674  
Gate, Screwed  
Code: ABWJN



Fig. 676  
Gate, Screwed  
Code: ABWJS



Fig. 675  
Gate, Flanged  
Code: ABWJP



Fig. 677  
Gate, Flanged  
Code: ABWJU

Non-Rising Spindle

Sizes.....	3½	4	5	6	8
Fig. 674.....	....Prices on application....				
Wgt., lbs. ....	60	82	118	126	272
Fig. 675.....	....Prices on application....				
Wgt., lbs. ....	74	98	135	190	298

Made from our regular iron body bronze mounted patterns as shown on pages 158 to 161.

Regularly supplied with iron hand wheel, steel studs and nuts. Bronze hand wheel and bronze studs and nuts can be supplied if desired.

Prices on Application

Outside Screw and Yoke

Sizes.....	3½	4	5	6	8
Fig. 676.....	....Prices on application....				
Wgt., lbs. ....	63	91	140	200	312
Fig. 677.....	....Prices on application....				
Wgt., lbs. ....	74	86	155	218	335

Dimensions, Inches

Sizes.....	3½	4	5	6	8
Face to face, screwed.....	6⅞	7⅛	8⅛	8⅞	9⅞
Face to face, flanged.....	6⅝	7⅞	8⅞	9⅞	10⅞
Diameter of flanges.....	8½	9	10	11	13½
Thickness of flanges.....	⅜	⅝	⅝	1	1⅛
Centre to top of wheel, non-rising spindle.....	13¼	15⅞	18	20⅞	24
Centre to top of wheel, outside screw.....	13⅞	16	19	21⅞	27⅞
Centre to top of spindle when open, outside screw.....	18⅞	21¼	25⅞	29¼	37¼
Diameter of hand wheel.....	8	9	10	12	14



# J E N K I N S   B R O N Z E   V A L V E S

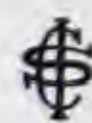
## GATE

### Medium Pattern—Non-Rising Spindle

For 200 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0205-123456



**Fig. 270**  
Gate, Screwed  
Code: ABUSA

These valves have globe-shaped body and double-faced solid wedge. Guides cast in body prevent chattering when partially open and keep wedge in line for perfect seating. When the valve is fully open the wedge is entirely lifted from the line of flow.



**Fig. 271**  
Gate, Flanged  
Code: ABUSF

Sizes .....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 270 .....	2.35	2.35	2.75	3.25	4.50	6.00	8.00	13.00	20.00	32.50
Wgt., lbs. and oz. ....	1-3	1-2	1-9	2-6	3-12	5-8	6-11	11-5	16-4	26-6
Fig. 271 .....				10.25	12.50	16.25	21.50	31.00	45.00	67.50
Wgt., lbs. and oz. ....				6-12	9-2	12-0	16-6	22-10	34-0	48-0

### Dimensions, Inches

Sizes .....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed. .	2 5/16	2 5/16	2 1/2	2 7/8	3 1/2	3 15/16	4 9/32	5 1/16	5 3/4	7
Face to face, flanged. .	3 1/4	3 1/4	3 1/4	3 11/16	4 1/4	4 3/4	5 1/16	6 1/2	7 1/2	8 1/2
Diameter of flanges. . .	3	3	3 3/4	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4
Thickness of flanges. . .	3/8	3/8	13/32	7/16	1/2	17/32	9/16	5/8	11/16	3/4
Centre to top of hand wheel. . . . .	4 1/8	4 1/8	4 5/8	5 3/8	6 1/4	6 7/8	7 1/4	8 1/2	10 1/2	11 3/4
Diameter of hand wheel. . . . .	2 1/16	2 1/16	2 7/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5	6 1/2



J E N K I N S   B R O N Z E   V A L V E S

GATE

Medium Pattern—Non-Rising Spindle

For 200 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure

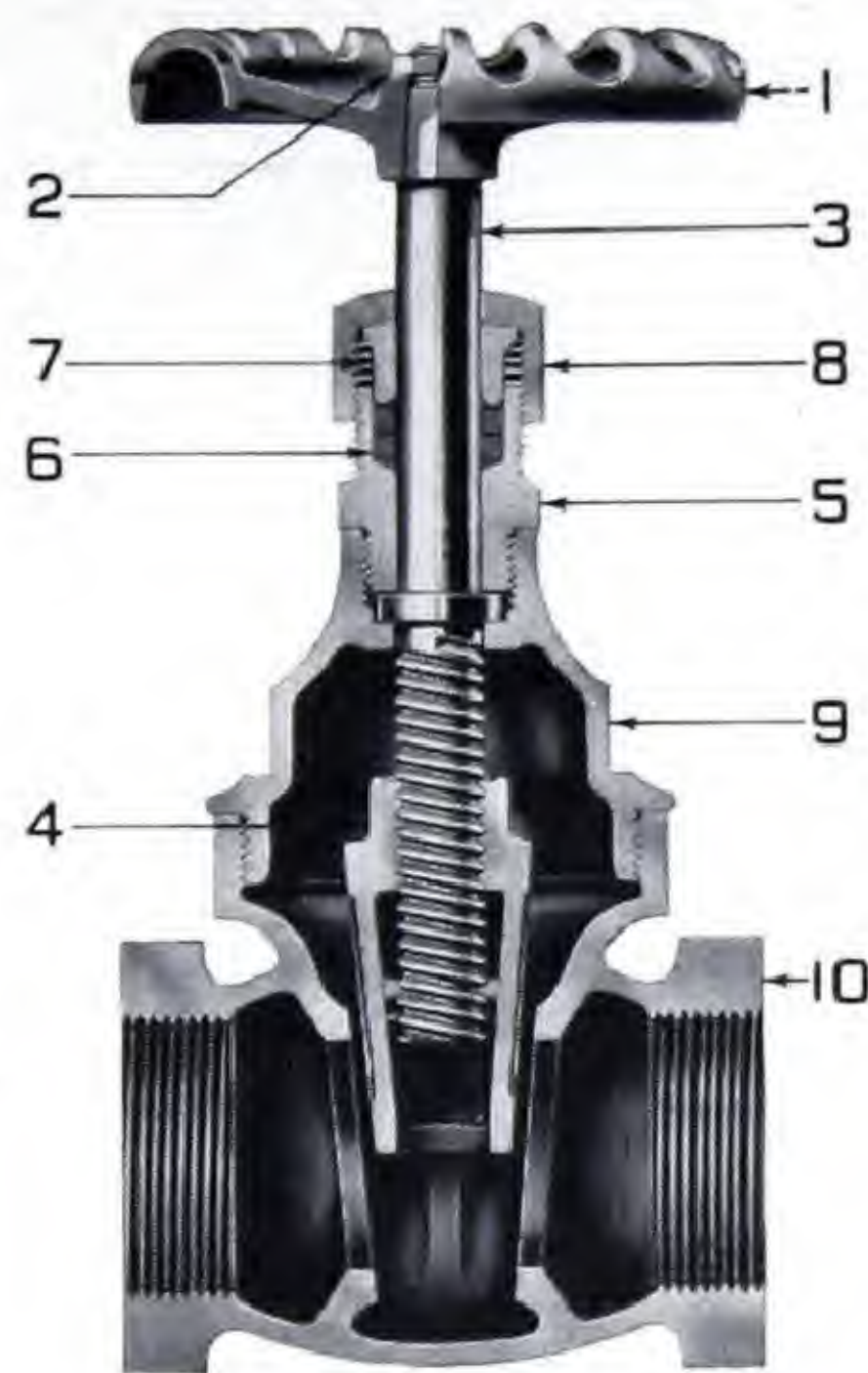


Fig. 270  
Sectional View

List Prices of Parts

Part No.....Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Non-Heat Wheel.....	.12	.12	.18	.25	.25	.25	.35	.40	.50	1.25
2. Wheel-Nut.....	.05	.05	.05	.05	.05	.05	.05	.05	.06	.06
3. Spindle.....	.20	.20	.25	.25	.40	.55	.60	.85	1.25	1.75
4. Wedge.....	.35	.35	.40	.45	.55	.75	.95	1.65	2.95	4.15
5. Stuffing Box.....	.25	.25	.25	.30	.35	.50	.50	.75	1.05	1.15
7. Gland.....	.05	.05	.05	.05	.05	.10	.10	.15	.30	.30
8. Packing Nut.....	.15	.15	.15	.20	.25	.35	.35	.50	.55	.65
9. Bonnet.....	.50	.50	.55	.65	.95	1.20	1.65	2.60	4.00	6.80
T.C. Trimming Complete (All parts except body).....	1.50	1.50	1.75	2.10	2.85	3.60	4.40	6.85	10.65	16.00



J E N K I N S   B R O N Z E   V A L V E S

GATE

Medium Pattern—Outside Screw and Yoke

For 200 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0206-123456



Fig. 275  
Gate, Screwed  
Code: ABUST

These valves have globe-shaped body and double-faced solid wedge. Guides cast in body prevent chattering when partially open and keep wedge in line for perfect seating. When the valve is fully open, the wedge is entirely lifted from the line of flow.

The rising spindle of this type of valve serves as an indicator. As the spindle threads are outside the valve, it is a simple and easy matter to lubricate and clean the spindle.



Fig. 276  
Gate, Flanged  
Code: ABUTE

Sizes.....	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 275.....	8.75	10.25	12.00	15.00	22.00	32.00	50.00
Wgt., lbs. and oz.....	3-3	4-6	6-3	8-0	12-11	19-0	29-11
Fig. 276.....	16.00	18.50	22.50	29.00	40.00	58.00	86.00
Wgt., lbs. and oz.....	6-14	7-3	12-13	17-8	24-0	35-12	51-0

Dimensions, Inches

Sizes.....	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed.....	2 7/8	3 1/2	3 15/16	4 3/32	5 1/16	5 3/4	7
Face to face, flanged.....	3 11/16	4 1/4	4 3/4	5 1/16	6 1/2	7 1/2	8 1/2
Diameter of flanges.....	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4
Thickness of flanges.....	7/16	1/2	17/32	9/16	5/8	11/16	3/4
Centre to top of hand wheel.....	5 5/16	6	6 13/16	7 1/16	8 3/4	10 7/16	12 1/4
Centre to top of spindle, open.....	6 9/16	7 9/16	8 1/2	9 1/2	11 3/16	13 9/16	15 3/4
Diameter of hand wheel.....	3 5/8	3 5/8	3 7/8	4 3/8	5	6 1/4	6 11/16



J E N K I N S   B R O N Z E   V A L V E S

GATE  
Medium Pattern—Outside Screw and Yoke

For 200 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure

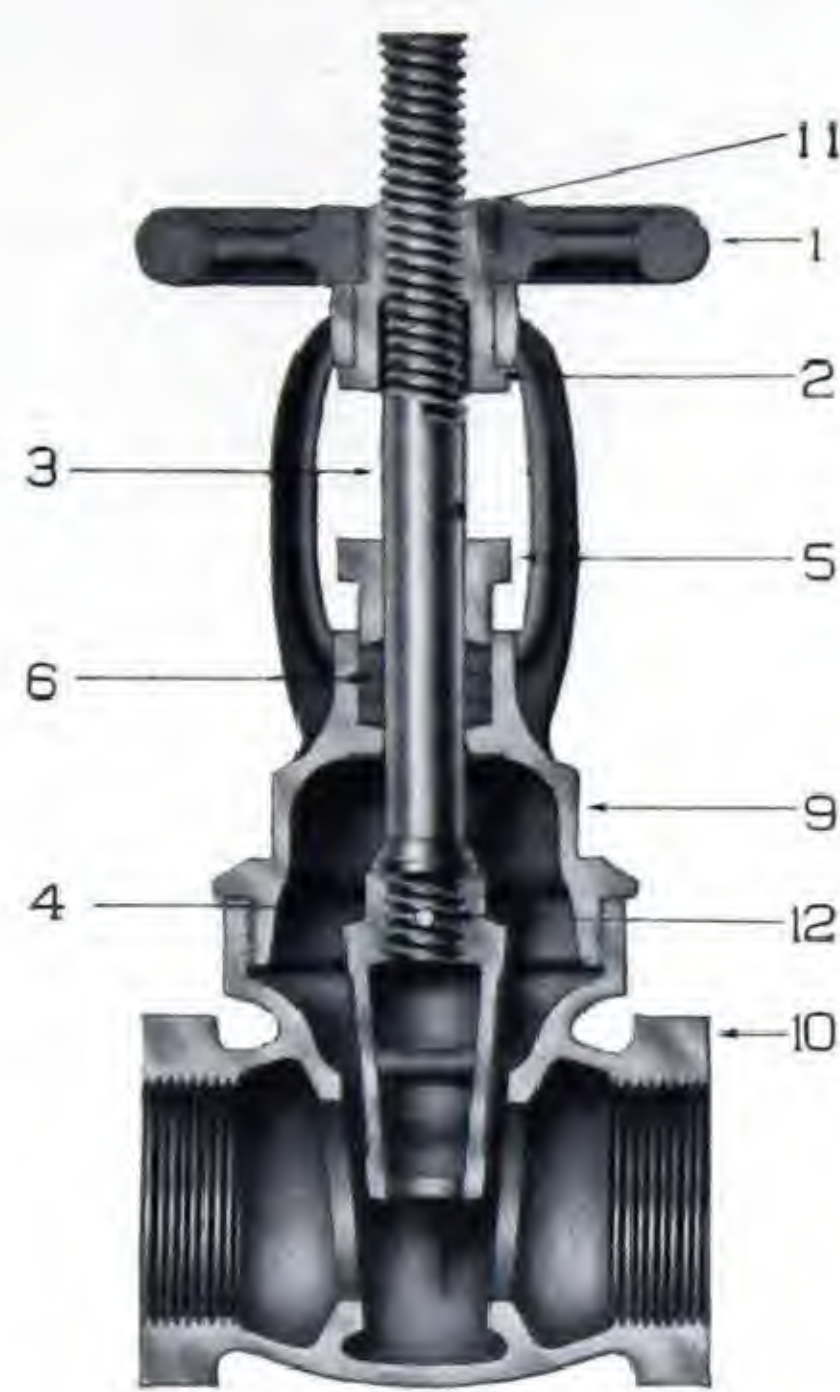


Fig. 275  
Sectional View

List Prices of Parts

Part No.	Sizes	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel.....		.50	.80	.95	1.00	1.10	1.90	2.50
2. Yoke Nut.....		.55	.75	1.15	1.25	1.30	1.65	1.75
3. Spindle.....		.80	1.00	1.10	1.40	2.50	3.30	4.30
4. Wedge.....		.85	1.10	1.25	1.40	2.50	4.25	7.50
5. Gland.....		.85	1.05	1.10	1.15	1.20	1.50	1.90
7. Gland Studs (Bronze).....	}	.25	.30	.30	.35	.40	.45	.55
8. Gland Nuts (Bronze).....								
9. Bonnet.....		2.50	3.40	3.55	4.40	6.25	8.25	13.00
11. Wheel Screw.....		.05	.05	.05	.08	.08	.08	.08
12. Wedge Pin.....		.05	.08	.08	.08	.12	.15	.15

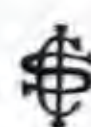


# J E N K I N S   B R O N Z E   V A L V E S

## GATE

### Extra Heavy Pattern—Non-Rising Spindle

For 250 Pounds Steam Working Pressure  
or 400 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0207-123456



**Fig. 280**  
Gate, Screwed  
Code: ABUTY

These Jenkins Gate Valves have globe-shaped body and double-faced solid wedge. Guides cast in the body prevent the wedge from chattering when valve is partially open and keep it in line for perfect seating. When fully opened, the wedge is entirely removed from the line of flow.



**Fig. 281**  
Gate, Flanged  
Code: ABUUB

Sizes .....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Figure 280.....	4.00	4.00	5.00	6.00	8.00	11.25	16.50	23.00	40.00	65.00
Wgt., lbs. and oz.....	1-3	1-2	2-9	3-10	5-10	7-13	11-15	17-3	25-12	39-8
Figure 281.....				13.00	16.00	21.50	30.00	41.00	65.00	100.00
Wgt., lbs. and oz.....				8-0	10-5	13-10	20-13	28-6	53-0	58-12

### Dimensions, Inches

Sizes .....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Face to face, screwed.....	2 5/16	2 5/16	2 3/4	3 1/8	3 1/2	3 7/8	4	4 1/2	5 1/8	6 1/4
Face to face, flanged.....	3 1/4	3 1/4	3 15/16	4 7/16	5	5 1/2	6	7 1/8	8 1/8	9
Diameter of flanges.....	3	3	3 3/4	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4
Thickness of flanges.....	3/8	3/8	13/32	7/16	1/2	17/32	9/16	5/8	11/16	3/4
Centre to top of hand wheel.....	4 1/8	4 1/8	5 7/8	6 7/16	7 11/16	8 3/8	9 1/2	10 11/16	12 1/2	13 3/4
Diameter of hand wheel..	2 1/16	2 1/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5	6 1/2	7 1/2



J E N K I N S   B R O N Z E   V A L V E S

GATE

Extra Heavy Pattern—Non-Rising Spindle

For 250 Pounds Steam Working Pressure  
or 400 Pounds Oil, Water, Gas Working Pressure

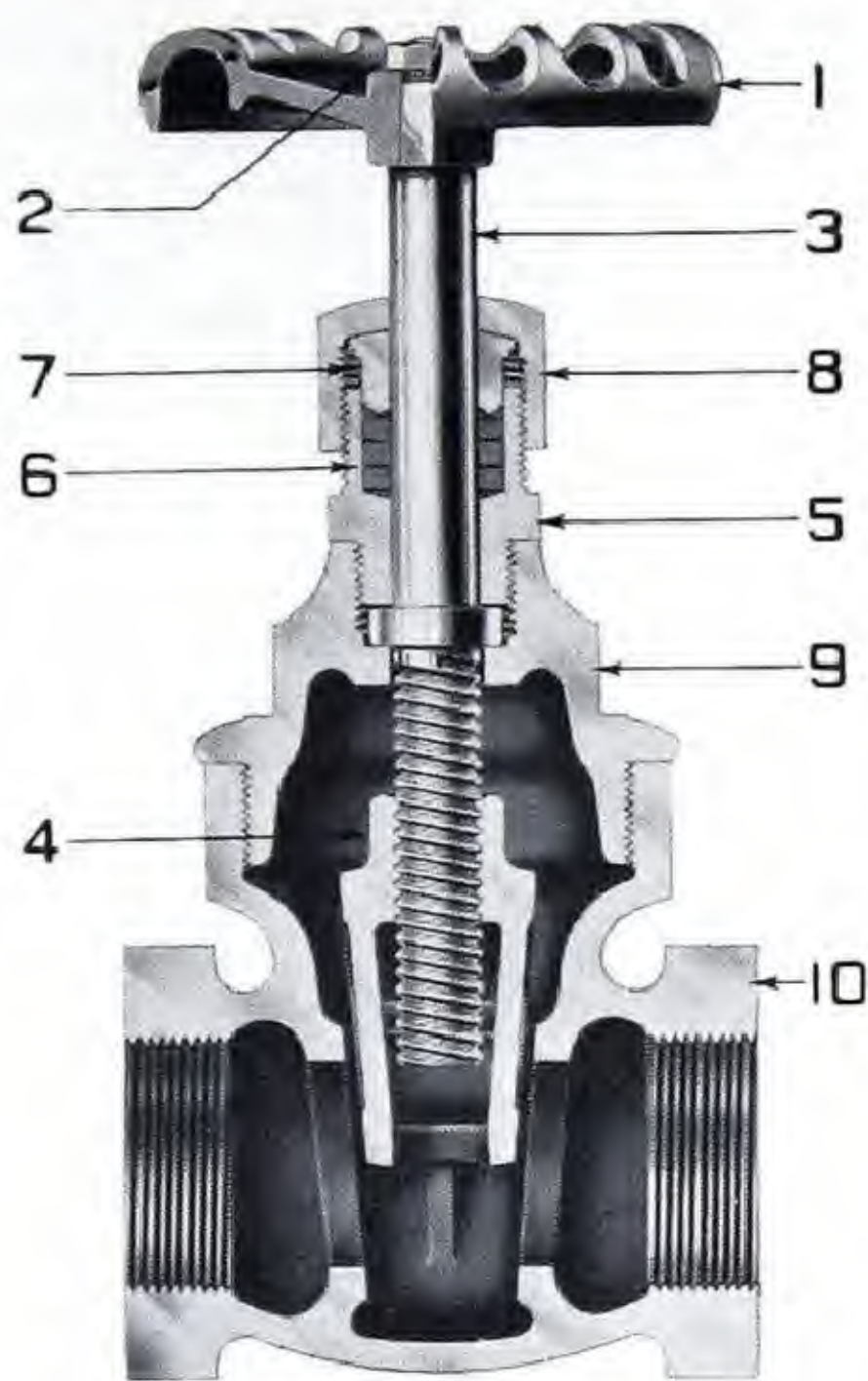


Fig. 280  
Sectional View

List Prices of Parts

Part No.	Sizes	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Non-heat wheel . . . .		.15	.15	.25	.25	.25	.35	.40	.50	1.30	1.40
2. Wheel nut . . . . .		.05	.05	.05	.05	.05	.05	.05	.10	.20	.20
3. Spindle . . . . .		.40	.40	.60	.65	.90	1.00	1.45	1.80	2.45	8.00
4. Wedge . . . . .		.45	.45	.65	.75	.95	1.40	2.00	2.95	4.35	5.70
5. Stuffing box . . . . .		.40	.40	.60	.65	.75	1.00	1.10	1.20	1.85	3.05
6. Packing . . . . .		.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
7. Gland . . . . .		.10	.10	.15	.20	.20	.25	.35	.35	.50	.60
8. Packing nut . . . . .		.20	.20	.30	.35	.55	.65	.90	.95	1.20	1.65
9. Bonnet . . . . .		.65	.65	1.00	1.25	1.80	2.35	3.55	4.95	8.55	11.75



# JENKINS BRONZE VALVES

## GATE

### Extra Heavy Pattern—Outside Screw and Yoke

For 250 Pounds Steam Working Pressure  
or 400 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 055-123456



Fig. 282  
Gate, Screwed  
Code: ABUUC

These Jenkins Gate Valves have globe-shaped bodies and double-faced solid wedge. Guides cast in the body prevent chattering when valve is partially open. When fully open, the wedge is entirely lifted from the line of flow.

The rising spindle of this type of valve serves as an indicator. As the spindle threads are outside the valve, it is a simple and easy matter to lubricate and clean the spindle.



Fig. 283  
Gate, Flanged  
Code: ABUUF

Sizes.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Fig. 282.....	11.50	13.75	17.25	23.50	32.00	52.00	74.50
Wgt., lbs. and oz.....	4-3	5-14	8-7	12-4	18-13	27-5	42-8
Fig. 283.....		21.00	27.00	35.50	48.00	76.00	111.00
Wgt., lbs. and oz.....		11-0	14-1	21-4	30-0	43-12	61-10

#### Dimensions, Inches

Sizes.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Face to face, screwed.....	$3\frac{1}{8}$	$3\frac{1}{2}$	$3\frac{7}{8}$	4	$4\frac{1}{2}$	$5\frac{1}{8}$	$6\frac{1}{4}$
Face to face, flanged.....	$4\frac{7}{16}$	5	$5\frac{1}{2}$	6	$7\frac{1}{8}$	$8\frac{1}{8}$	9
Diameter of flanges.....	$4\frac{5}{8}$	$4\frac{7}{8}$	$5\frac{1}{4}$	$6\frac{1}{8}$	$6\frac{1}{2}$	$7\frac{1}{2}$	$8\frac{1}{4}$
Thickness of flanges.....	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{17}{32}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$
Centre to top of hand-wheel.....	$5\frac{11}{16}$	$6\frac{11}{16}$	$7\frac{5}{8}$	$7\frac{15}{16}$	$9\frac{5}{8}$	$11\frac{7}{16}$	$12\frac{3}{8}$
Centre to top of spindle, open.....	$6\frac{13}{16}$	$8\frac{1}{16}$	$9\frac{5}{16}$	10	$12\frac{1}{4}$	$14\frac{5}{8}$	$15\frac{1}{2}$
Diameter of hand-wheel.....	$3\frac{5}{8}$	$3\frac{7}{8}$	$4\frac{3}{8}$	$4\frac{3}{8}$	5	$6\frac{1}{4}$	$7\frac{5}{8}$



JENKINS BRONZE VALVES

GATE  
Extra Heavy Pattern—Outside Screw and Yoke

For 250 Pounds Steam Working Pressure  
or 400 Pounds Oil, Water, Gas Working Pressure

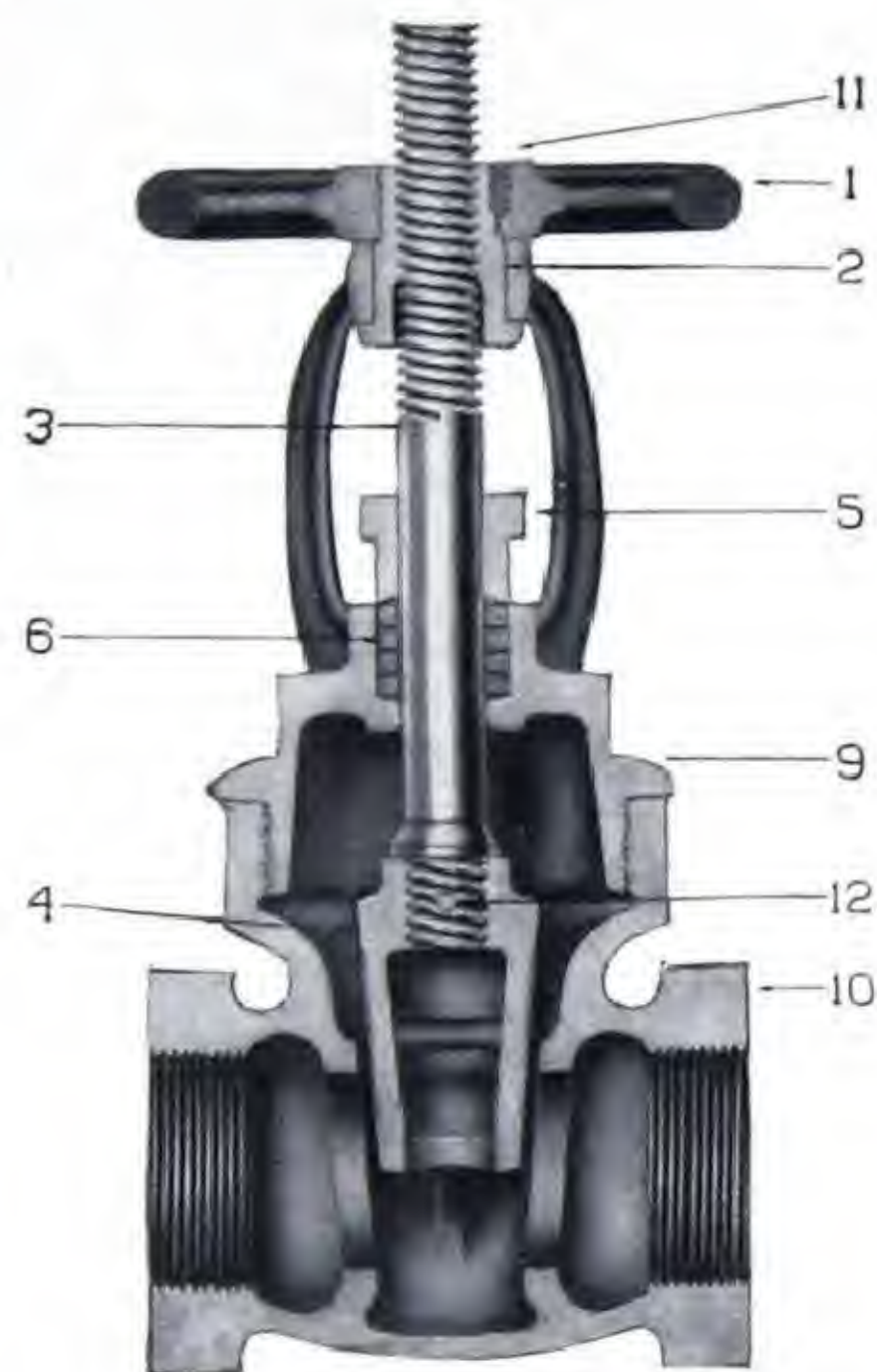


Fig. 282  
Sectional View

Part No.	Sizes	3/4	1	1 1/4	1 1/2	2	2 1/2	3
1. Wheel.....		.75	1.00	1.40	2.00	2.10	2.20	2.40
2. Yoke nut.....		.85	1.10	1.20	1.40	1.70	2.00	2.60
3. Spindle.....		1.40	1.90	2.00	2.60	2.80	6.10	11.00
4. Wedge.....		1.20	1.60	1.90	3.00	3.90	5.00	6.10
5. Gland.....		.70	.85	.95	1.30	1.40	1.50	3.30
7. Gland studs (bronze).....	}	.20	.25	.25	.30	.35	.40	.40
8. Gland nuts (bronze).....								
9. Bonnet.....		3.30	4.40	5.30	6.40	10.00	16.00	18.00
11. Wheel screw.....		.05	.05	.05	.08	.08	.08	.08
12. Wedge pin.....		.05	.10	.10	.15	.15	.20	.20



## WHEELS FOR VALVES



**Fig. 185**  
Code: ABUFT

### Bronze Non-Heat Wheel

When polished or polished and plated, these wheels are very attractive in appearance as well as serviceable. The design prevents overheating when in service.



**Fig. 571**  
Code: ABWAH

### Bronze Knurled Edge Wheel

The Bronze Knurled type of wheel adds materially to the appearance of finished valves.



**Fig. 570**  
Code: ABWAG

### Malleable Iron Non-Heat Wheel Green Enamelled

The Malleable Iron Wheel illustrated is usually fitted to all regular type valves. It is of great strength and practically indestructible. The special design prevents them from becoming too hot to handle when in service.



**Fig. 572**  
Code: ABWA

### Fibre Composition Wheel

The Fibre Composition Wheel is very strong. The bottom plate is moulded in the composition reinforcing the wheel. The wheel is a lustrous black and is regularly fitted to all Jenkins Radiator Valves.



**Fig. 189**  
Code: ABUGH

### Wire Wheel

This wheel was designed for use on valves where the temperature is extremely high. It remains cool under practically any condition of service.



JENKINS BRONZE VALVES

WHEELS FOR VALVES

No. of Wheel			1	2	3	4	5	6	7	8	9	10	11	12	13
Size of Square			$\frac{3}{16}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{9}{32}$	$\frac{5}{16}$	$\frac{23}{64}$	$\frac{25}{64}$	$\frac{7}{16}$	$\frac{17}{32}$	$\frac{37}{64}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{41}{64}$
Bronze	Fig. 185	Diameter of wheels	$1\frac{1}{2}$	.....	$2\frac{1}{16}$	$2\frac{7}{16}$	$2\frac{13}{16}$	3	$3\frac{7}{16}$	$4\frac{1}{8}$	$4\frac{3}{8}$	5	.....	.....	.....
		Price each	.40	.....	.40	.70	1.50	1.70	2.00	2.70	3.75	5.00	.....	.....	.....
		Weight lbs. & oz.	0-1	.....	0-1 $\frac{1}{2}$	0-2 $\frac{1}{2}$	0-3	0-3 $\frac{1}{2}$	0-6	0-9	0-11	1-0	.....	.....	.....
	Fig. 571	Diameter of wheels	$1\frac{1}{2}$	.....	2	$2\frac{5}{16}$	$2\frac{3}{4}$	$3\frac{1}{4}$	$3\frac{11}{16}$	$4\frac{3}{16}$	$4\frac{13}{16}$	$5\frac{5}{16}$	.....	.....	.....
		Price each	.40	.....	.40	.70	1.50	1.70	2.00	2.70	3.75	5.00	.....	.....	.....
		Weight lbs. & oz.	0-1 $\frac{1}{2}$	.....	0-2	0-4	0-6 $\frac{1}{2}$	0-9	0-12 $\frac{1}{2}$	0-14	1-10	1-14	.....	.....	.....
Malleable Iron	Fig. 570	Diameter of wheels	$1\frac{1}{2}$	$1\frac{3}{4}$	$2\frac{1}{16}$	$2\frac{7}{16}$	$2\frac{13}{16}$	3	$3\frac{7}{16}$	$4\frac{1}{8}$	$4\frac{3}{8}$	5	$5\frac{15}{16}$	$6\frac{1}{2}$	$7\frac{1}{2}$
		Price each	.10	.10	.10	.10	.15	.15	.25	.30	.35	.55	.65	.75	.75
		Weight lbs. & oz.	0- $\frac{1}{2}$	0-1	0-1 $\frac{1}{2}$	0-2	0-3	0-4	0-5	0-7	0-9	0-14	1-4	1-7	1-15
Fibre Composition	Fig. 572	Diameter of wheels	$1\frac{9}{16}$	.....	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$	4	$4\frac{1}{2}$	.....	.....	.....
		Price each	.24	.....	.24	.24	.25	.25	.26	.28	.30	.30	.....	.....	.....
		Weight lbs. & oz.	0-1 $\frac{1}{2}$	.....	0-2	0-3	0-4	0-6	0-7	0-9	0-13	0-15	.....	.....	.....
Wire Wheel	Fig. 189	Diameter of wheels	$1\frac{1}{2}$	$2\frac{1}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	$2\frac{7}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	4	$4\frac{1}{2}$	.....	.....	.....
		Price each	.30	.30	.30	.30	.35	.40	.45	.60	.80	1.20	.....	.....	.....
		Weight lbs. & oz.	0- $\frac{1}{2}$	0-1	0-1	0-1 $\frac{1}{2}$	0-2 $\frac{1}{2}$	0-3	0-4	0-5	0-6	0-9	.....	.....	.....

Fig. 171, Lock Shield Tee Handle Key is listed on page 27

Table Below Lists No. of Wheel Required for Each Valve

Fig. No.	Sizes	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
106-114, 114-A, 106-A-111-A, 106-A-S, 108-A-S, 124, 125, 165-168, 173-181, 310, 311, 314, 315, 460-463, 464-467, 630-633.....		1	3	3	4	5	6	7	8	9	10	11
134, 135, 280, 281, 500-505, 513, 515, 530-537.....		.....	4	4	5	6	7	8	9	10	12	13
300, 300-S, 301, 303, 304, 307, 308, 355.....		.....	3	3	4	4	5	6	7	8	10	10
270, 271.....		.....	3	3	4	5	6	7	8	9	10	12
357.....		.....	.....	.....	4	4	5	6	7	9	.....	.....
425-430, 438, 440.....		2	3	3	4	5	6	7	8	9	10	11
490, 491, 497, 470, 471, 40-43.....		.....	2	2	3	4	5	6	7	8	9	10
493, 494.....		.....	.....	.....	3	3	4	5	6	.....	.....	.....
508, 509, 741-744.....		2	2	2	3	3	.....	.....	.....	.....	.....	.....



## COLOURED VALVE WHEELS—(Patented)

These wheels are: *Sanitary, heat-proof, water-proof, non-absorbent, and provide no cavities or depressions where foreign matter might become lodged.* They are especially designed for equipment and apparatus, fine plumbing and radiator valves of heating systems. In hospitals for sterilizers, on hotel and restaurant coffee urns, in laboratories and model installations where colour, lustre and sanitation are desirable, the wheels cannot be excelled.

### Two-Piece Design

Consists of two parts, a bakelite hub which fits securely onto the spindle of the valve and a *coloured* cover plate which snaps into the top of the hub. A unique design holds the cover firmly in position. Assembly on the valve is simple . . . the only tool necessary being a small wrench for the wheel nut which screws on the spindle end inside the hub.

The complete wheel has a smooth, lustrous finish. A fluted rim permits tight grip when the valve is being operated.

### Cover Plates, Colour and Wording

Standard colours, carried in stock, are: *Red, blue, gray, green, and black*, but practically any colour can be supplied at no extra charge when quantities exceed 50 of each.

The cover plates can be supplied plain or with service markings moulded in raised letters. Standard marking and colour combinations are:

Red . . . . STEAM SUPPLY  
Blue . . . . STEAM RETURN  
Gray . . . . WATER WASTE  
Black . . . STEAM EXHAUST  
Green . . . WATER SUPPLY

Other combinations of these standard colours and markings can be supplied when quantities exceed 50 of each; also any of these standard markings in combination with special colours when quantities exceed 50 of each.

Special markings require new engravings, and when such markings are required, an additional charge, *covering the actual cost* of the engraving, will be made.

### Interchangeability of Parts

These wheels are made in three sizes for use on Jenkins Valves. The size of the different spindle squares of the hubs is listed below and a chart showing the different Jenkins Valves on which these wheels will fit is shown on page 117.

The wheel diameter is the same on the three sizes; this permits complete interchangeability of cover plates, as all, regardless of colour and marking, snap into any hub.

**When colours and markings are not specified, these wheels will be supplied with a plain gray cover plate as shown on this page.**

### List Price

Fig. 711 complete with hub and cover plate **\$0.60**

### Dimensions of Spindle Square in Hub

No. 3 Wheel	No. 4 Wheel	No. 5 Wheel
1/4" square	9/32" square	5 16" square



Sanitary Wheel with Plain Gray Cover Plate.



Sanitary Wheel with Red Cover Plate.  
Shows the words *STEAM SUPPLY* moulded in raised letters on the top of the plate.



Sanitary Wheel with Green Cover Plate.  
Shows the words *WATER SUPPLY* moulded in raised letters on top of the plate.

Fig. 711

Sanitary Valve Wheel  
Code: ABWNE



# JENKINS IRON BODY VALVES

GLOBE, ANGLE, CROSS, Y OR BLOW-OFF  
AND VARIOUS TYPES OF CHECK VALVES  
INCLUDING COMBINATION STOP AND CHECK

•

Pages 121 to 151 inclusive



## DESIGN OF JENKINS VALVES

Described on Pages 121 to 151

**A**MONG the different types of valves listed in this section are *globe, angle, cross, Y or blow-off and various types of check valves including combination stop and check.*

\* \* \*

Standard Patterns are fitted with Jenkins renewable discs, each exactly suited to specific service conditions. These discs are of the proper resiliency and readily conform to the seat, always assuring absolute tightness. Discs of various metal alloys are also made for conditions where rubber discs are not recommended as in Figs. 288 and 289. These metal discs have the same dimensions as the rubber discs and are interchangeable with them. The disc that each group of valves is regularly fitted with and those for other services, are explained on their respective pages. Discs for other conditions than those listed, are explained in a comprehensive chart on page 213. For special services, or where unusual conditions are involved, our Engineering Service should be consulted.

*The disc is contained in a disc holder, secured by a plate or nut and can be renewed easily and quickly at slight expense. In each case, the thickness of the disc equals the depth of the holder, giving full rim protection to the seat face of the disc.* The disc holders in sizes 2" to 3" are cast bronze. In larger sizes, the holder is of cast iron. Sizes 3½" and larger, the seat rings are arranged with a centre guide bearing, for the guide stem of the disc holder, to insure perfect alignment of seating surfaces. Extra heavy patterns are fitted with Bronze Regrinding Discs. In all sizes the seat rings are arranged with a centre guide bearing, for the guide stem of the disc, assuring perfect alignment of seating surfaces.

The bodies of these valves are heavily constructed of the highest grade gray iron, having an average tensile strength of 40,000 lbs. per sq. in., resulting in valves with unusually high factors of safety. Cast bronze seat rings screw into the body in all sizes. Provided with lugs, the ring can be easily removed and replaced whenever necessary.

\* \* \*

Spindles, of liberal dimensions, are of cast manganese bronze. The tensile strength of this metal is 50,000 to 60,000 lbs. per sq. in. *Operating threads are Acme Standard, the lowest threads being above the packing, contained in the stuffing box, prevents tearing and cutting during operation.*

\* \* \*

The bonnet flange is bolted to the body by numerous steel studs amply spaced. Length of thread bearing in bronze yoke nut for engagement with spindle, is most liberal in order to minimize wear. The stuffing box is liberal in depth and cubics, having more than ample space for packing.

A cast iron flanged gland, arranged with two steel studs, is placed parallel to the run of the valve for accessibility in repacking. *This gland compresses the packing and permits a tight spindle joint with slight effort, extending the life of the packing and permitting ease of operation.*

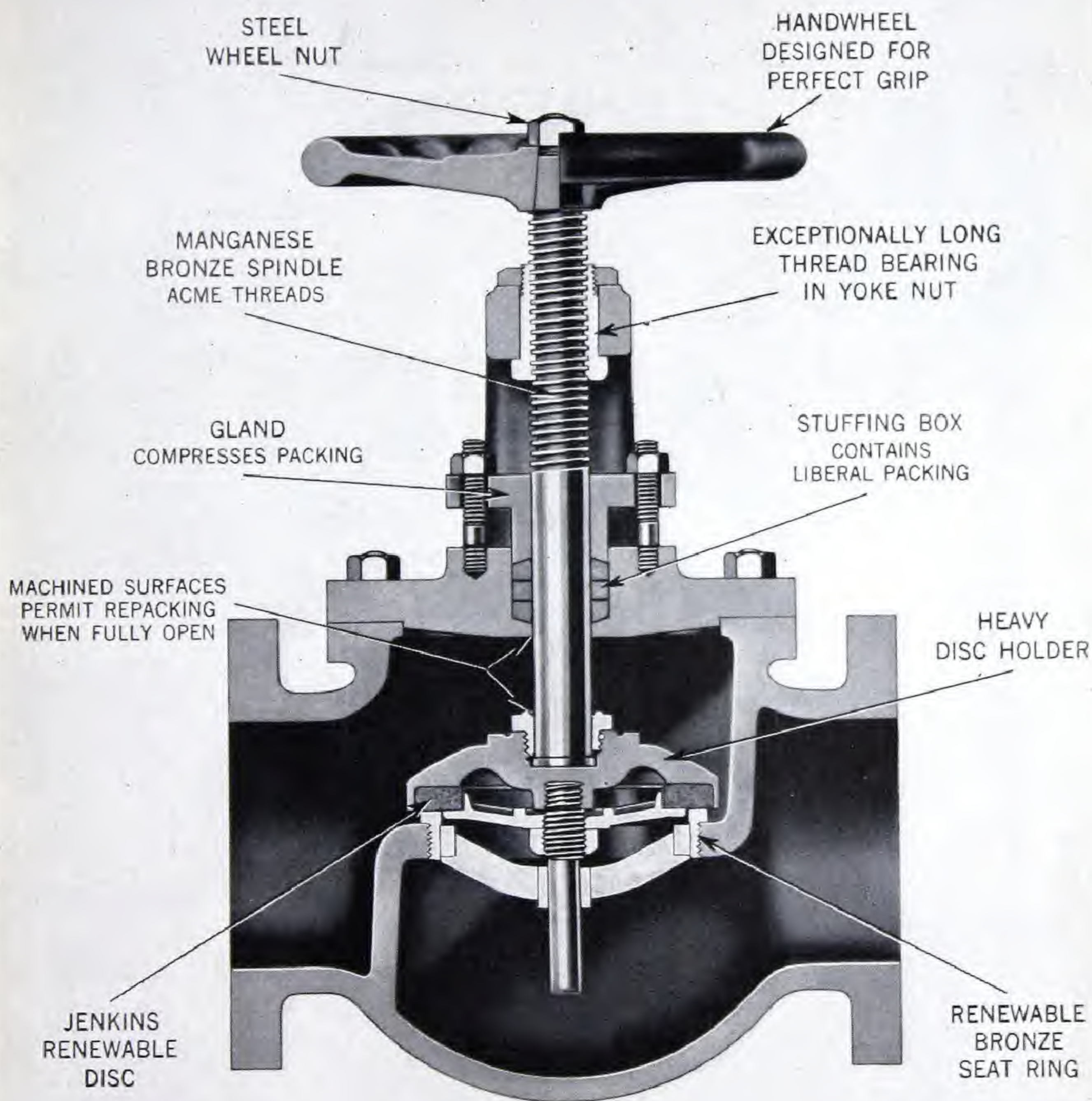
\* \* \*

The lock nut, securing the disc holder to the spindle, is machined true with a beaded top surface and seats against a corresponding machined surface of the bonnet, *permitting the valves to be repacked under full pressure when in the open position.*



FIG. 142

## STANDARD IRON BODY GLOBE VALVE



ADDITIONAL INFORMATION LISTED ON FOLLOWING PAGES



# JENKINS IRON BODY VALVES

## GLOBE, ANGLE, CROSS Standard Pattern

Bronze Mounted

Renewable Seat Ring

Jenkins Disc

Regularly fitted with No. 119 Disc for 150 Pounds Steam Working Pressure  
For 250 Pounds Oil, Water, Gas Working Pressure use No. 936 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0199-123456 and 0200-123456



**Fig. 141**  
Globe, Screwed  
Code: ABUAF

**Fig. 145**  
Cross, Screwed  
Code: ABUAN  
(Not illustrated)



**Fig. 143**  
Angle, Screwed  
Code: ABUAJ

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Fig. 141.....	10.00	12.00	16.75	19.50	24.00	40.00	48.00	90.00	130.00	185.00
Wgt., lbs.....	23	36	53	67	92	137	211	365	566	848
Fig. 143.....	10.00	12.00	16.75	19.50	24.00	40.00	48.00	90.00	130.00	185.00
Wgt., lbs.....	24	37	54	65	85	131	204	354	510	812
Fig. 145.....	27.00	30.00	40.00	50.00	56.00	84.00	109.00	188.00	.....	.....
Wgt., lbs.....	26	37	55	66	94	140	205	358	.....	.....
Fig. 142.....	11.75	14.00	18.50	21.50	26.00	42.00	50.00	90.00	130.00	185.00
Wgt., lbs.....	31	45	64	82	110	152	228	389	575	858
Fig. 144.....	11.75	14.00	18.50	21.50	26.00	42.00	50.00	90.00	130.00	185.00
Wgt., lbs.....	32	49	64	79	109	152	220	368	531	828
Fig. 146.....	31.00	35.00	45.00	55.00	62.00	90.00	116.00	188.00	.....	.....
Wgt., lbs.....	36	55	69	84	117	162	232	393	.....	.....



**Fig. 142**  
Globe, Flanged  
Code: ABUAH

**Fig. 146**  
Cross, Flanged  
Code: ABUAO  
(Not illustrated)



**Fig. 144**  
Angle, Flanged  
Code: ABUAL



JENKINS IRON BODY VALVES

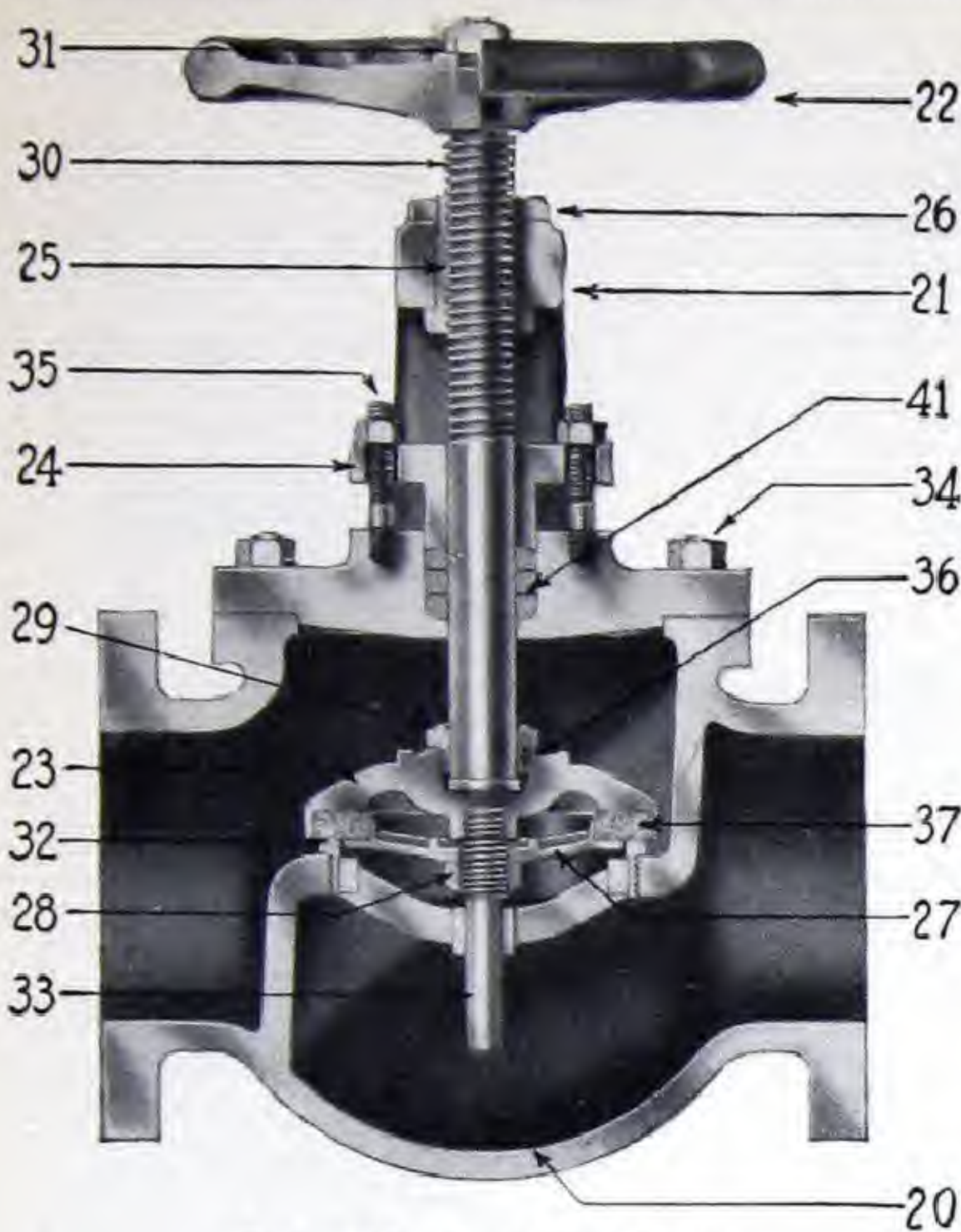


Fig. 142—Sectional View

GLOBE, ANGLE, CROSS  
Standard Pattern

Bronze Mounted  
Renewable Bronze Seat Ring  
Jenkins Disc

Description of Parts

20. Body

21. Yoke

22. Wheel

23. Disc Holder

24. Gland

25. Yoke Nut

26. Jam Nut

27. Disc Plate

28. Disc Plate Nut

29. Lock Nut—Globe

30. Spindle
31. Wheel Nut

32. Seat Ring

33. Guide Stem

34. Yoke Stud Bolt

35. Gland Stud Bolts

36. Cotter Pin

37. Disc

38. Lock Nut—Angle  
(not illustrated)

41. Packing

List Prices of Parts

Part No.....	Sizes	2	2½	3	3½	4	5	6	8	10	12
21. Yoke.....		2.20	2.70	3.10	3.40	3.60	5.90	8.75	14.50	21.25	31.00
22. Wheel.....		.35	.42	.60	.88	1.00	1.60	2.30	3.60	3.90	5.40
23. Disc Holder.....		1.70	2.50	4.00	3.00	3.00	4.00	4.50	5.40	6.50	12.00
24. Gland.....		.30	.30	.45	.45	.45	.70	.70	.90	1.60	2.00
25. Yoke Nut.....		.55	.60	.65	.65	1.60	2.40	2.80	3.90	4.75	6.00
26. Jam Nut.....						.40	.50	.60	.90	1.00	1.00
27. Disc Plate.....			.40	.60	.70	1.10	2.00	2.70	5.40	8.40	.....
28. Disc Plate Nut*...		.20	.20	.20	.25	.25	.40	.40	.40	.40	.....
29. Lock Nut, Globe..		.15	.38	.38	.45	.45	.80	1.00	1.10	1.20	1.35
30. Spindle.....		1.70	2.50	3.30	3.50	4.80	8.25	8.75	17.00	20.00	26.50
31. Wheel Nut.....		.12	.17	.17	.17	.20	.35	.35	.40	.55	.70
32. Seat Ring*.....		.90	1.00	1.60	2.00	3.50	4.50	5.70	11.60	24.70	37.05
33. Guide Stem.....					.55	.55	.90	1.25	1.35	1.45	1.90
38. Lock Nut, Angle..		.15	.38	.38	.45	.45	.80	1.00	1.10	1.20	1.35

\*Size 2" takes square hole disc and disc removing nut, same as bronze valve, Fig. 106; sizes 2½" to 10", inclusive, take parts 27 and 28; larger sizes take part 43, with plate screws. Part 23 in sizes 2" to 3" is of bronze, larger sizes are of iron.

Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
A.....	6½	7¾	9¾	10	12	13¼	16	18¾	21½	25¾
AA.....	7	7¾	9¾	10	12	13¼	16	18¾	.....	.....
B.....	7⅛	7½	9¼	10	11¾	13⅛	16	18½	21¼	24½
BB.....	7¾	9	9¼	10¾	11¾	13	16	18½	.....	.....
C.....	3½	3⅞	4⅞	5	6	6⅞	8	9¾	10¾	12⅞
D.....	3⅞	4½	4⅞	5⅞	5⅞	6½	8	9¼	10⅞	12¼
E.....	6	7	7½	8½	9	10	11	13½	16	19
F.....	⅝	1⅞	¾	1⅞	1⅞	1⅞	1	1⅞	1⅞	1¼
G.....	9¾	11	12⅞	13¼	15¼	17¼	18¾	22⅞	25	30
GG.....	10⅞	12	13⅞	13⅞	14⅞	17⅞	19	22⅞	25¾	31⅞
J.....	7	7	8	8	9	10	12	14	16	18

A—Face to face, globe, screwed. AA—Face to face, cross, screwed. B—Face to face, globe, flanged. BB—Face to face, cross, flanged. C—Centre to face, angle, screwed. D—Centre to face, angle flanged. E—Diameter of flanges. F—Thickness of flanges. G—Globe, centre to top of wheel, open. GG—Angle or cross, centre to top of wheel, open. J—Diameter of hand wheel.



# JENKINS IRON BODY VALVES

## GLOBE AND ANGLE Standard Pattern

Bronze Trimmed

Renewable Seat Ring

Jenkins Disc

Regularly Fitted with No. 119 Disc for 150 Pounds Steam Working Pressure  
For 250 Pounds Oil, Water, Gas, Use No. 936 Disc



Fig. 137  
Globe, Screwed  
Code: ABUAB



Fig. 137  
Sectional View

Fig. 138  
Globe, Flanged  
(Not illustrated)  
Code: ABUAC



Fig. 139  
Angle, Screwed  
Code: ABUAD

Fig. 140  
Angle, Flanged  
(Not illustrated)  
Code: ABUAE

Sizes	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Fig. 137	2.50	3.40	4.25	6.25	8.35	13.20	17.00	25.00
Wgt., lbs. & oz	1-9	2-12	4-3	6-7	8-12	15-8	24-0	35-0
Fig. 139	2.50	3.40	4.25	6.25	8.35	13.20	17.00	25.00
Wgt., lbs. & oz	1-9	2-12	4-3	6-7	8-6	14-0	23-0	34-0
Fig. 138	*	*	*	*	*	*	*	*
Wgt., lbs. & oz	3-9	5-2	7-0	9-8	12-12	22-0	33-8	45-8
Fig. 140	*	*	*	*	*	*	*	*
Wgt., lbs. & oz	3-12	5-6	7-5	9-12	12-12	20-8	32-8	44-8

\* Prices on Application

### Dimensions, Inches

Sizes	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Globe, face to face, screwed	2 7/8	3 9/16	4 1/8	4 3/4	5 1/4	6 1/2	7 3/4	9 3/8
Angle, centre to face, screwed	1 1/2	1 13/16	2 1/16	2 5/16	2 1/2	3 7/16	3 7/8	4 11/16
Globe, face to face, flanged	3 3/16	3 7/8	4 1/2	5	5 5/16	7 1/8	8	9 1/4
Angle, centre to face, flanged	2 3/8	2 5/8	2 13/16	3 1/16	3 3/8	3 7/8	4 1/2	4 5/8
Thickness of flanges	7/16	7/16	7/16	1/2	9/16	5/8	1 1/16	3/4
Diameter of flanges	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2
Globe, centre to top of wheel, open	4 15/16	5 11/16	6 5/16	7 1/4	7 15/16	8 15/16	10	11 1/8
Angle, centre to top of wheel, open	5 3/16	5 11/16	6 1/2	7 3/16	7 15/16	9 1/4	10 3/8	11 3/4
Diameter of hand wheel	2 1/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5	5 15/16

These valves are regularly fitted with a Jenkins Composition Disc and Renewable Bronze Seat Ring.



JENKINS IRON BODY VALVES

COMBINATION STOP AND CHECK  
GLOBE AND ANGLE  
Standard Pattern

Regularly Fitted with No. 110-H Disc for 250 Pounds Water, Gas  
Working Pressure

For 150 Pounds Steam Working Pressure Use No. 119 Disc

Conforming to Canadian Interprovincial Specifications  
Registration Numbers 01057-123456 and 01058-123456

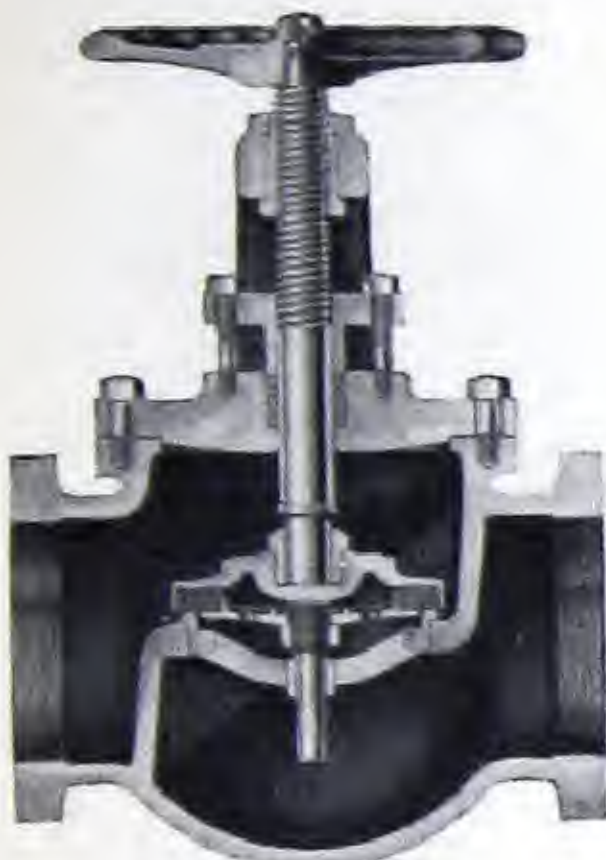


Fig. 634  
Globe, Screwed  
Code: ABWFFV

Fig. 635  
Globe, Flanged  
(Not illustrated)  
Code: ABWFFX

These perform the functions both of a stop and a check valve. The disc holder is allowed to slide freely on the spindle. With the pressure beneath the disc, the disc holder rises as the spindle is opened, being forced up by the pressure. In case of return flow, however, the disc holder falls, closing the valve automatically as in a check valve. Largely used in boiler feed lines for which their advantages are obvious. The lift can be regulated by means of opening or closing the spindle.

These valves are also made when required with Bronze Regrinding Disc and Seat Ring.

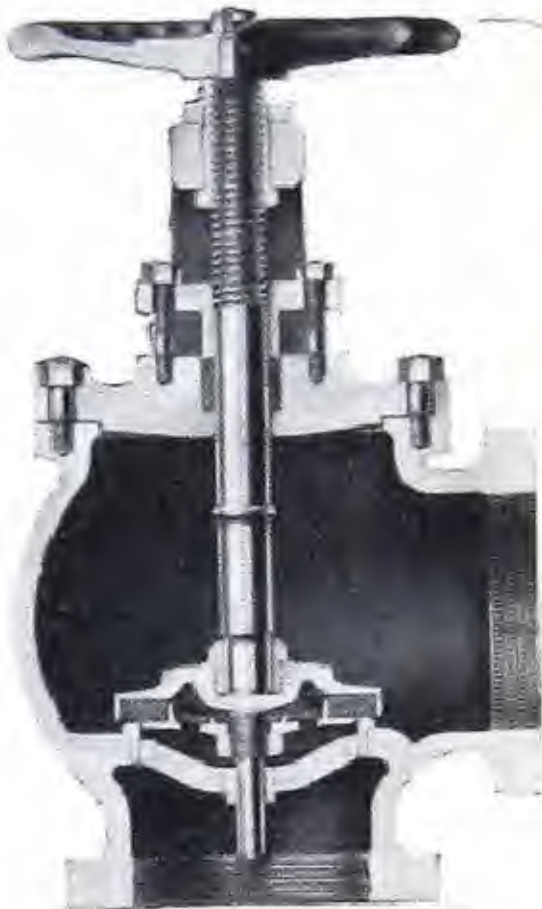


Fig. 636  
Angle, Screwed  
Code: ABWFFZ

Fig. 637  
Angle, Flanged  
(Not illustrated)  
Code: ABWFGA

Weights, Pounds

Sizes	2	2½	3	3½	4	5	6	8	10	12
Fig. 634	22	37	54	66	94	137	205	367	566	848
Fig. 635	29	46	65	84	114	153	220	383	575	858
Fig. 636	22	36	53	65	93	132	190	345	510	812
Fig. 637	29	47	62	79	106	148	205	373	531	827

Dimensions, Inches

Sizes	2	2½	3	3½	4	5	6	8	10	12
A	6½	7¾	9¾	10	12	13¼	16	18¾	21½	25¾
B	7⅞	7½	9¼	10	11¾	13⅞	16	18½	21¼	24½
C	3½	3⅞	4⅞	5	6	6⅞	8	9¾	10¾	12⅞
D	3⅞	4½	4⅞	5⅞	5⅞	6½	8	9¼	10⅞	12¼
E	6	7	7½	8½	9	10	11	13½	16	19
F	⅝	⅞	¾	⅞	⅞	⅞	1	1⅞	1⅞	1¼
G	9⅞	10¾	12⅞	13	15	17	18½	21¾	24½	28½
GG	10⅞	11¾	13⅞	13⅞	14⅞	17⅞	18¾	22⅞	24¼	28¾
J	7	7	8	8	9	10	12	14	16	18

A-Face to face, globe, screwed. B-Face to face, globe, flanged. C-Centre to face, angle, screwed. D-Centre to face, angle, flanged. E-Diameter of flanges. F-Thickness of flanges. G-Globe, centre to top of hand wheel, open. GG-Angle, centre to top of hand wheel, open. J-Diameter of hand wheel.

Prices on Application

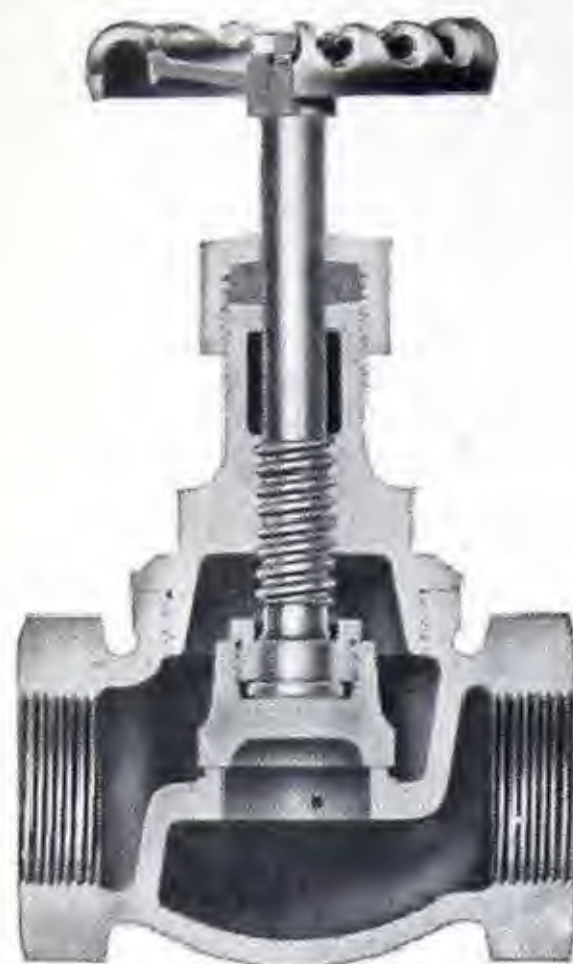


## GLOBE AND ANGLE With Solid Iron Disc

For 175 Pounds Working Pressure

Jenkins All Iron Valves are recommended for service in places where, because of possible corrosion, no bronze mountings of any kind can be employed. These services include *solutions of cyanide, ammonia, caustic soda, potash and alkaline fluids.*

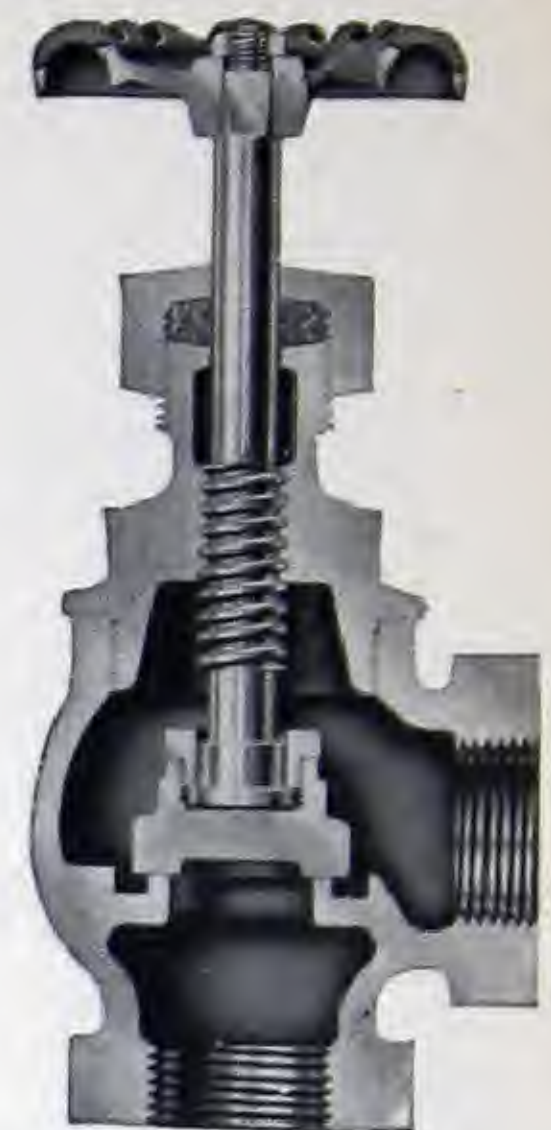
The solid iron disc in Figs. 75, 76, 77 and 78 is flat and has been ground so that it assures tight seating. The seat is raised and has a flat contact surface.



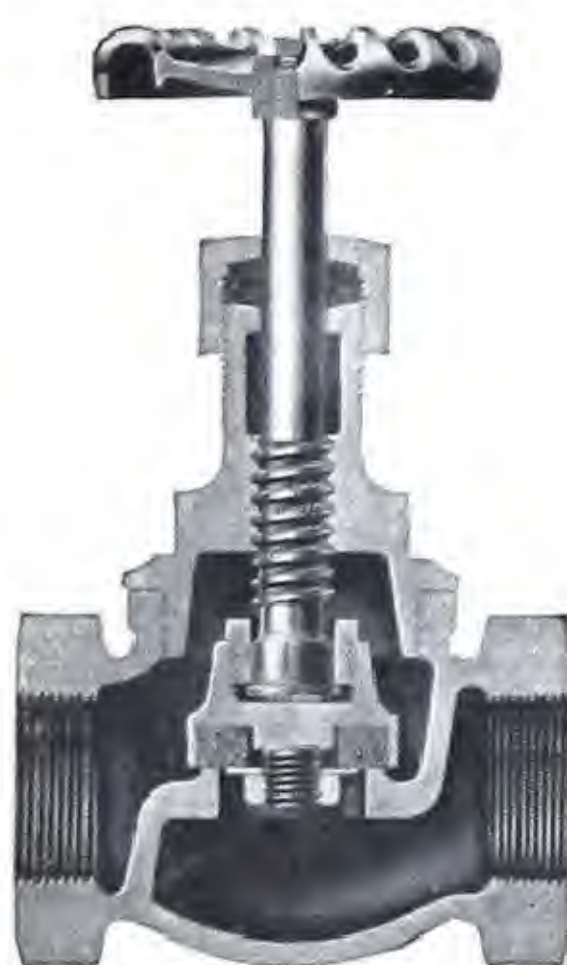
**Fig. 75**  
Globe, Screwed  
(Sectional View)  
Code: ABTKA

**Fig. 76**  
Globe, Flanged  
(Not illustrated)  
Code: ABTKU

**Fig. 78**  
Angle, Flanged  
(Not illustrated)  
Code: ABTMA



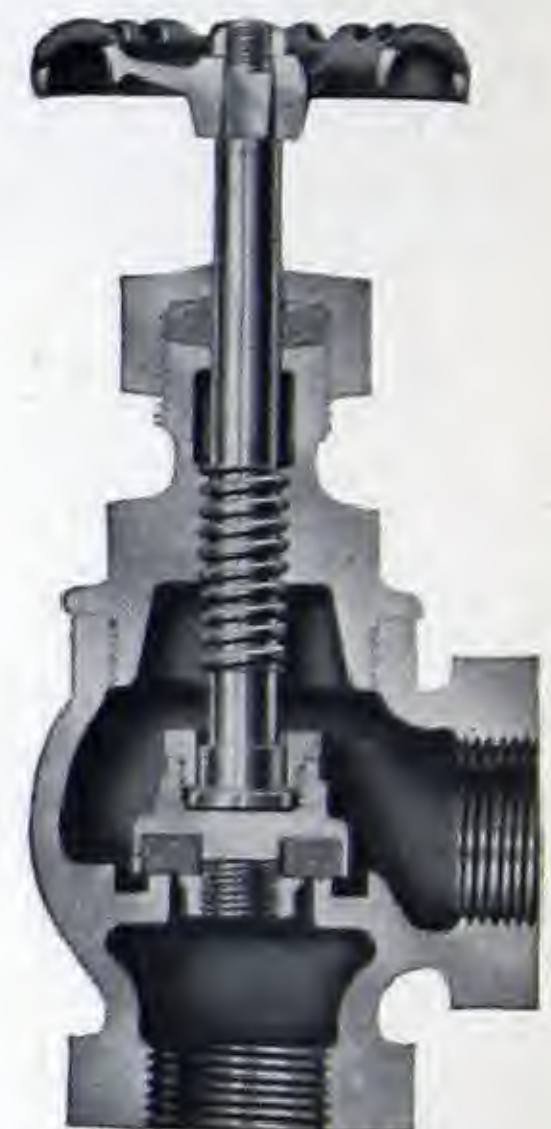
**Fig. 77**  
Angle, Screwed  
(Sectional View)  
Code: ABTLI



**Fig. 75-D**  
Globe, Screwed  
(Sectional View)  
Code: ABTKI

## With Composition Disc Regularly Fitted with No. 80-A Disc

These valves are similar in construction to the valves described above. In place of the solid iron disc, these valves have the advantage of iron disc holder fitted with a Jenkins Renewable Composition Disc. *When ordering, it is necessary to specify the service for which the valve is intended, so that the correct composition disc can be supplied.*



**Fig. 77-D**  
Angle, Screwed  
(Sectional View)  
Code: ABTLU

**Fig. 76-D**  
Globe, Flanged  
(Not illustrated)  
Code: ABTKV

**Fig. 78-D**  
Angle, Flanged  
(Not illustrated)  
Code: ABTMC

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2
Figs. 75, 75-D.	2.50	3.40	4.25	6.25	8.35	13.20	Figs. 76, 76-D,	*	*	*	*	*	*
Wgt., lbs. & oz.	1-9	2-13	4-3	6-14	9-5	16-2	Wgt., lbs. & oz.	3-9	5-2	7-0	10-0	13-5	22-10
Figs. 77, 77-D.	2.50	3.40	4.25	6.25	8.35	13.20	Figs. 78, 78-D,	*	*	*	*	*	*
Wgt., lbs. & oz.	1-12	3-0	4-7	6-6	9-0	16-0	Wgt., lbs. & oz.	4-0	5-6	7-9	9-12	13-6	21-12

\*Prices on application.

### Dimensions, Inches

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2
Globe, face to face, screwed.....	2 7/8	3 9/16	4 1/8	4 3/4	5 1/4	6 1/2
Globe, face to face, flanged.....	3 3/16	3 7/8	4 1/2	5	5 5/16	7 1/8
Angle, centre to face, screwed.....	1 15/32	1 13/16	2 1/16	2 5/16	2 1/2	3 7/16
Angle, centre to face, flanged.....	2 3/8	2 5/8	2 13/16	3 1/16	3 3/8	3 7/8
Diameter of flanges.....	3 1/2	3 7/8	4 1/4	4 5/8	5	6
Thickness of flanges.....	7/16	7/16	7/16	1 1/2	9/16	5/8
Globe, centre to top of hand wheel, open.....	4 3/4	5 1/4	6	7 1/8	8	9
Angle, centre to top of hand wheel, open.....	4 7/8	5 1/8	6 1/8	7	8	9 1/2
Diameter of hand wheel.....	2 7/16	2 13/16	3	3 7/16	4 1/8	4 3/8



JENKINS ALL IRON VALVES

GLOBE AND ANGLE

Outside Screw and Yoke

Solid Iron Disc

For 250 Pounds Working Pressure  
Recommended for Ammonia, Cyanide, Caustic Soda, Potash and Alkaline Fluids



Fig. 79  
Globe, Screwed  
Code: ABTMU

Fig. 80  
Globe, Flanged  
Code: ABTNI

All Iron Globe and Angle Valves have flat solid iron clappers ground to form a perfect seat with the seat of the body. These valves can be furnished if desired with an iron disc holder and with a Jenkins composition disc.

Jenkins All Iron Valves are recommended for service in places where, on account of possible corrosion, bronze mountings can not be used.



Fig. 81  
Angle, Screwed  
Code: ABTOB

Fig. 82  
Angle, Flanged  
Code: ABTOJ

Sizes.....	2	2½	3	3½	4	5	6	8
Fig. 79.....	*	*	*	*	*	*	*	*
Wgt., lbs.....	23	36	53	67	92	137	211	365
Fig. 80.....	*	*	*	*	*	*	*	*
Wgt., lbs.....	31	45	64	82	110	152	228	389
Fig. 81.....	*	*	*	*	*	*	*	*
Wgt., lbs.....	24	37	54	65	85	131	204	354
Fig. 82.....	*	*	*	*	*	*	*	*
Wgt., lbs.....	32	49	64	79	109	152	220	368

\*Prices on Application.

Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8
Globe, face to face, screwed.....	6½	7¾	9¾	10	12	13¼	16	18¾
Globe, face to face, flanged.....	7⅛	7½	9¼	10	11¾	13⅛	16	18½
Angle, centre to face, screwed.....	3½	3⅞	4⅛	5	6	6⅝	8	9¾
Angle, centre to face, flanged.....	3⅞	4½	4⅝	5⅝	5⅞	6½	8	9¼
Diameter of flanges.....	6	7	7½	8½	9	10	11	13½
Thickness of flanges.....	⅝	1⅛	¾	1⅜	1⅝	1⅝	1	1⅛
Globe, centre to top of hand wheel, open.....	9¾	11	12⅝	13¼	15¼	17¼	18¾	22⅛
Angle, centre to top of hand wheel, open.....	10⅝	12	13⅛	13⅝	14⅞	17⅝	19	22⅛
Diameter of hand wheel.....	7	7	8	8	9	10	12	14



# JENKINS IRON BODY VALVES

## GLOBE AND ANGLE

Standard Pattern with Extra Heavy Flanges

Bronze Mounted

Renewable Seat Ring

Renewable Disc

Regularly Fitted with Steam Metal Disc for 175 Pounds Steam Working Pressure

For 300 Pounds Oil, Water, Gas Working Pressure, use No. 1106 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0201-123456 and 0202-123456

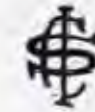


Fig. 288  
Globe, Flanged  
Code: ABUUS

These valves are exactly the same design and construction as Fig. 141 to 144 on pages 122 and 123, except that these valves have flanges to American extra heavy dimensions.



Fig. 289  
Angle, Flanged  
Code: ABUVA

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Fig. 288.....	21.00	26.00	34.00	41.00	51.00	77.00	90.00	160.00	219.00	305.00
Wgt., lbs.....	38	54	81	98	133	180	263	447	672	989
Fig. 289.....	21.00	26.00	34.00	41.00	51.00	77.00	90.00	160.00	219.00	305.00
Wgt., lbs.....	36	53	81	94	133	175	251	425	658	960

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Globe, face to face....	9	10	11¾	12½	13¾	15½	17	20	23	26
Angle, centre to face..	4½	5	5⅞	6¼	6⅞	7¾	8½	10	11½	13
Diameter of flanges...	6½	7½	8¼	9	10	11	12½	15	17½	20½
Thickness of flanges...	⅞	1	1⅞	1⅜	1¼	1⅜	1⅞	1⅝	1⅞	2
Globe, centre to top of wheel, open.....	9⅜	11	12⅝	13¼	15¼	17¼	18¾	22⅞	25	30
Angle, centre to top of wheel, open.....	10⅝	12	13⅞	13⅝	14⅞	17⅝	19	22⅞	25¾	31⅞
Diameter of hand wheel.....	7	7	8	8	9	10	12	14	16	18

For List Prices of Parts, see page 123.



JENKINS IRON BODY VALVES

GLOBE, ANGLE, CROSS  
Extra Heavy Pattern

Bronze Mounted                      Renewable Seat Ring    Bronze Regrinding Disc

For 250 Pounds Steam Working Pressure  
or 400 Pounds Oil, Water, Gas Working Pressure

Conforming to Canadian Interprovincial  
Specifications.    Registration Numbers  
0237-123456 and 0238-123456

Approved by the Canadian Government Steamship  
Inspection Board  
Screwed ends: Sizes 2"  
Flanged ends: Sizes 2" to 8"



Fig. 162A  
Globe, Screwed  
Code: ABUCR



Fig. 163A  
Angle, Screwed  
Code: ABUCU

Fig. 340  
Cross, Screwed  
Code: ABVBK  
(Not illustrated)

Sizes .....	2	2½	3	3½	4	5	6	8	10	12
Fig. 162A .....	26.00	31.00	39.00	45.00	61.00	84.00	111.00	175.00	286.00	365.00
Wgt., lbs. ....	54	65	93	114	159	225	320	535	860	1183
Fig. 163A .....	26.00	31.00	39.00	45.00	61.00	84.00	111.00	175.00	286.00	365.00
Wgt., lbs. ....	50	58	83	105	155	209	290	518	803	1113
Fig. 340 .....	55.00	66.00	75.00	83.00	91.00	124.00	157.00	239.00	.....	.....
Wgt., lbs. ....	46	63	84	111	151	220	303	537	.....	.....
Fig. 162 .....	29.00	34.00	42.00	48.00	64.00	88.00	116.00	175.00	286.00	365.00
Wgt., lbs. ....	63	78	104	129	182	260	385	602	892	1240
Fig. 163 .....	29.00	34.00	42.00	48.00	64.00	88.00	116.00	175.00	286.00	365.00
Wgt., lbs. ....	56	68	97	120	176	242	335	542	840	1170
Fig. 341 .....	58.00	71.00	82.50	91.00	99.00	132.00	165.00	248.00	.....	.....
Wgt., lbs. ....	64	86	118	142	189	266	355	600	.....	.....



Fig. 162  
Globe, Flanged  
Code: ABUCO

Fig. 341  
Cross, Flanged  
Code: ABVBM  
(Not illustrated)



Fig. 163  
Angle, flanged  
Code: ABUCT

For list prices of Parts, see page 130.



# JENKINS IRON BODY VALVES

## GLOBE, ANGLE, CROSS

### Extra Heavy Pattern

Bronze Mounted

Renewable Seat Ring

Bronze Regrinding Disc

For 250 Pounds Steam Working Pressure  
or 400 Pounds Oil, Water, Gas Working Pressure

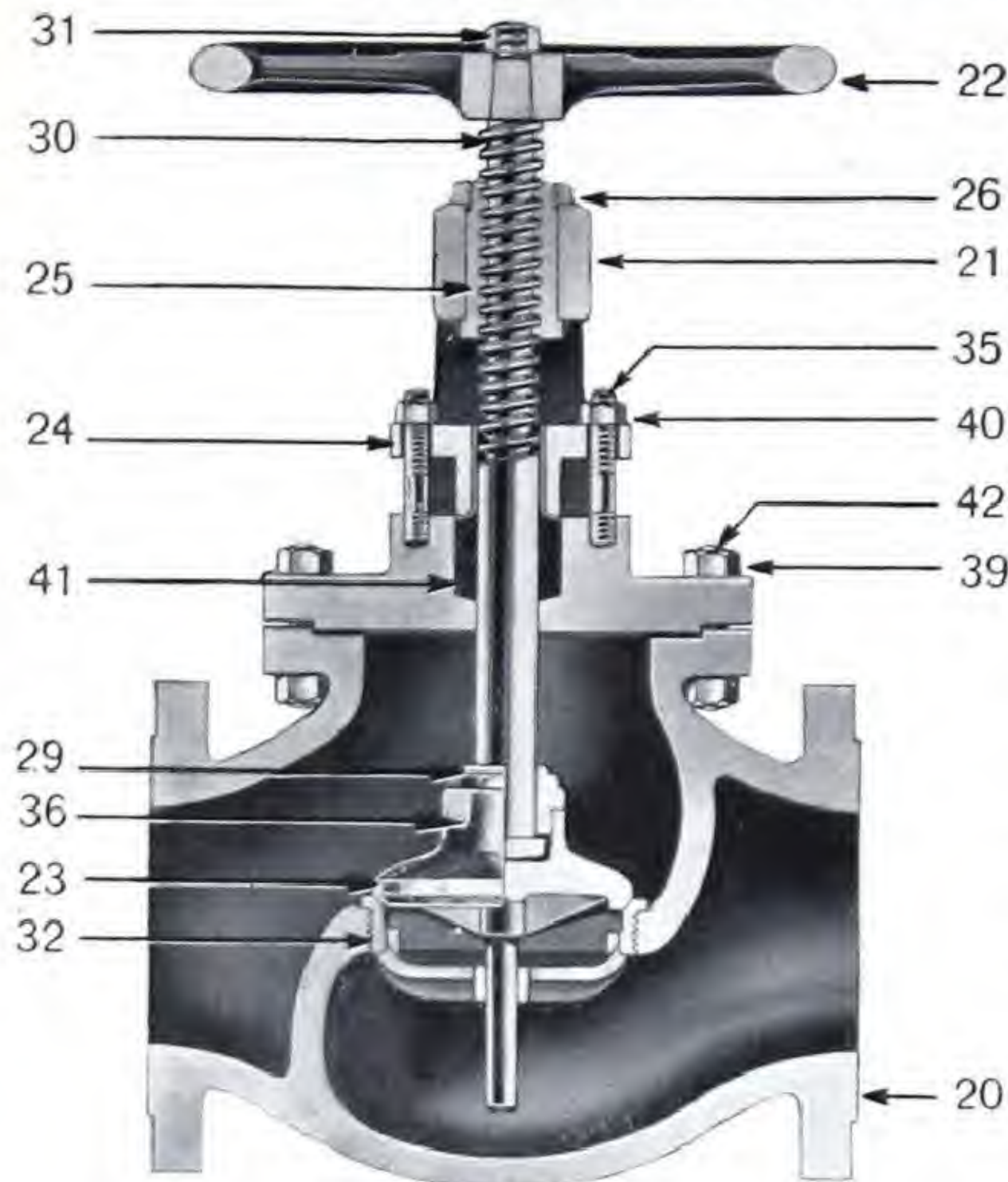


Fig. 162  
Sectional View

#### Description of Parts

- |                    |   |
|--------------------|---|
| 20. Body           | 31. Wheel Nut                           |
| 21. Yoke           | 32. Seat Ring                           |
| 22. Wheel          | 35. Gland Stud                          |
| 23. Disc           | 36. Cotter Pin                          |
| 24. Gland          | 38. Lock Nut—Angle<br>(not illustrated) |
| 25. Yoke Nut       | 39. Hex Nuts                            |
| 26. Jam Nut        | 40. Gland Stud Nut                      |
| 29. Lock Nut—Globe | 41. Packing                             |
| 30. Spindle        | 42. Stud Bolts                          |

#### List Prices of Parts

Part No. . . . . Sizes	2	2½	3	3½	4	5	6	8	10	12
21 . . . . .	5.45	5.75	6.30	7.65	11.10	12.95	16.20	27.20	52.15	60.85
22 . . . . .	1.15	1.30	1.60	1.70	2.75	4.45	5.45	8.65	11.60	13.40
23 . . . . .	3.90	5.20	7.10	8.00	9.25	11.75	16.00	21.10	29.55	43.95
24 . . . . .	.55	.55	.85	.85	1.05	1.60	1.85	3.35	4.65	4.95
25 . . . . .	1.80	1.80	2.30	2.30	2.90	3.60	4.55	7.80	13.30	19.60
26 . . . . .	.40	.40	.55	.55	.80	.80	.90	1.50	2.60	4.40
29 . . . . .	.55	.55	.65	.65	1.15	1.60	1.90	2.10	4.15	8.10
30 . . . . .	3.65	3.85	5.00	5.25	7.80	11.95	14.30	22.25	37.65	46.35
31 . . . . .	.25	.25	.25	.25	.30	.30	.30	.45	.45	.45
32 . . . . .	3.85	4.40	4.70	5.90	6.20	8.25	9.40	17.65	37.25	44.00
38 . . . . .	.55	.55	.65	.65	1.15	1.60	1.90	2.10	4.15	8.10

#### Dimensions, Inches

Sizes . . . . .	2	2½	3	3½	4	5	6	8	10	12
Face to face, globe and cross, screwed . . . . .	9	9	11½	12⅛	12¾	14¾	17	21	23	26
Face to face, globe and cross, flanged . . . . .	9¾	10	11¾	12¾	14	15¾	18	21	23	26
Centre to face, angle, screwed . . .	4⅞	5⅛	5⅞	6½	7	7¾	8¾	10½	11½	13
Centre to face, angle, flanged . . .	4⅞	5⅛	5⅞	6½	7	7¾	8¾	10½	11½	13
Diameter of flanges . . . . .	6½	7½	8¼	9	10	11	12½	15	17½	20½
Thickness of flanges . . . . .	⅞	1	1⅛	1⅜	1¼	1⅜	1⅞	1⅝	1⅞	2
Diameter of raised face . . . . .	4⅜	4⅝	5⅞	6⅝	6⅝	8⅝	9⅞	11⅝	14⅞	16⅞
Globe, centre to top of wheel, open.	13¼	13⅞	15½	16½	19	21⅞	23⅞	26⅞	28¾	32¼
Angle or cross centre to top of wheel, open . . . . .	12	12⅞	13¾	15⅞	17	19⅞	21⅞	25⅞	29¾	33½
Diameter of hand wheel . . . . .	8	8	10	10	12	14	16	20	24	28



JENKINS IRON BODY VALVES

GLOBE AND ANGLE  
Extra Heavy Pattern—With By-Pass

Bronze Mounted                      Renewable Seat Ring                      Bronze Regrinding Disc

For 250 Pounds Steam Working Pressure or 400 Pounds Oil, Water,  
Gas Working Pressure



Fig. 164  
Globe, Flanged  
Code: ABUDA

Conforming to Canadian Inter-  
provincial Specifications. Re-  
gistration Numbers 0237-123456  
and 0238-123456

These valves are exactly similar in  
design to figures 162 and 163 illustrated  
on page 129. They have, however, by-  
pass cast integral with the body.



Fig. 164c  
Angle, Flanged  
Code: ABUDK

Fig. 164a  
Globe, Screwed  
Code: ABUDC

Fig. 164b  
Angle, Screwed  
Code: ABUDF

Sizes.....	4	5	6	8	10	12
Fig. 164.....	Prices on application.....					
Wgt., lbs.....	186	265	392	610	870	1260
Fig. 164a.....	Prices on application.....					
Wgt., lbs.....	163	224	325	584	.....	.....
Fig. 164b.....	Prices on application.....					
Wgt., lbs.....	160	221	300	580	.....	.....
Fig. 164c.....	Prices on application.....					
Wgt., lbs.....	190	270	346	584	872	1265

Dimensions, Inches

Sizes.....	4	5	6	8	10	12
Globe, face to face, flanged.....	14	15 <sup>3</sup> / <sub>4</sub>	18	21	23	26
Globe, face to face, screwed.....	12 <sup>3</sup> / <sub>4</sub>	14 <sup>3</sup> / <sub>4</sub>	17	21	23	26
Angle, centre to face, flanged.....	7	7 <sup>3</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	13
Angle, centre to face, screwed.....	7	7 <sup>3</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	13
Diameter of flanges.....	10	11	12 <sup>1</sup> / <sub>2</sub>	15	17 <sup>1</sup> / <sub>2</sub>	20 <sup>1</sup> / <sub>2</sub>
Thickness of flanges.....	1 <sup>1</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>	1 <sup>7</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	1 <sup>7</sup> / <sub>8</sub>	2
Diameter of raised face.....	6 <sup>15</sup> / <sub>16</sub>	8 <sup>5</sup> / <sub>16</sub>	9 <sup>11</sup> / <sub>16</sub>	11 <sup>15</sup> / <sub>16</sub>	14 <sup>1</sup> / <sub>16</sub>	16 <sup>7</sup> / <sub>16</sub>
Globe, centre to top of wheel, open.....	19	21 <sup>1</sup> / <sub>16</sub>	23 <sup>15</sup> / <sub>16</sub>	26 <sup>7</sup> / <sub>8</sub>	28 <sup>3</sup> / <sub>4</sub>	32 <sup>1</sup> / <sub>4</sub>
Angle, centre to top of wheel, open.....	17	19 <sup>3</sup> / <sub>16</sub>	21 <sup>5</sup> / <sub>8</sub>	25 <sup>5</sup> / <sub>8</sub>	29 <sup>3</sup> / <sub>4</sub>	33 <sup>1</sup> / <sub>2</sub>
Diameter of hand wheel.....	12	14	16	20	24	28
Size of by-pass.....	1	1	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	2
Centre of main valve to centre of by-pass.....	7 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>2</sub>	11	12 <sup>3</sup> / <sub>4</sub>	14 <sup>1</sup> / <sub>2</sub>
Centre of by-pass to extreme outside.....	1 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>2</sub>



# JENKINS IRON BODY VALVES

## COMBINATION STOP AND CHECK GLOBE AND ANGLE Extra Heavy Pattern

Bronze Mounted

Renewable Seat Ring Bronze Regrinding Disc

For 250 Pounds Steam Working Pressure  
or 400 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 01065-123456 and 01066-123456



Fig. 643  
Globe, Flanged  
Code: ABWGO

Fig. 642  
Globe, Screwed  
(Not illustrated)  
Code: ABWGM

These perform the functions both of a stop and a check valve. The disc is allowed to slide freely on the spindle. With the pressure beneath the disc, disc rises as spindle is unscrewed, being forced up by the pressure. In case of return flow, however, disc falls, closing valve automatically as in a check valve. Largely used in boiler feed lines for which their advantages are obvious. The lift can be regulated by means of opening or closing the spindle.

See Pages 133 and 134 for Automatic  
Equalizing Stop and Check Valves.



Fig. 645  
Angle, Flanged  
Code: ABWGT

Fig. 644  
Angle, Screwed  
Code: ABWGR  
(Not illustrated)

### Weights, Pounds

Sizes	2	2½	3	3½	4	5	6	8	10	12
Fig. 642	54	65	93	114	159	220	315	530	850	1175
Fig. 643	63	78	104	129	182	260	385	602	892	1240
Fig. 644	50	58	83	105	155	216	290	518	803	1113
Fig. 645	56	68	97	120	176	242	335	563	842	1170

### Dimensions, Inches

Sizes	2	2½	3	3½	4	5	6	8	10	12
A	9	9	11½	12½	12¾	14¾	17	21	23	26
B	9¾	10	11¾	12¾	14	15¾	18	21	23	26
C	4⅞	5⅞	5⅞	6½	7	7¾	8¾	10½	11½	13
D	4⅞	5⅞	5⅞	6½	7	7¾	8¾	10½	11½	13
E	6½	7½	8¼	9	10	11	12½	15	17½	20½
F	⅞	1	1⅞	1⅞	1¼	1⅞	1⅞	1⅞	1⅞	2
FF	4⅞	4⅞	5⅞	6⅞	6⅞	8⅞	9⅞	11⅞	14⅞	16⅞
G	13	13⅞	15¼	16¼	18¾	20⅞	23⅞	26⅞	28	31¼
GG	11¾	11⅞	13½	15⅞	16¾	18⅞	21⅞	25⅞	24¾	29¼
J	8	8	10	10	12	14	16	20	24	28

A-Face to face, globe, screwed. B-Face to face, globe, flanged. C-Centre to face, angle, screwed. D-Centre to face, angle, flanged. E-Diameter of flanges. F-Thickness of flanges. FF-Diameter of raised face. G-Globe, centre to top of wheel, open. GG-Angle, centre to top of wheel, open. J-Diameter of hand wheel.

Prices on Application

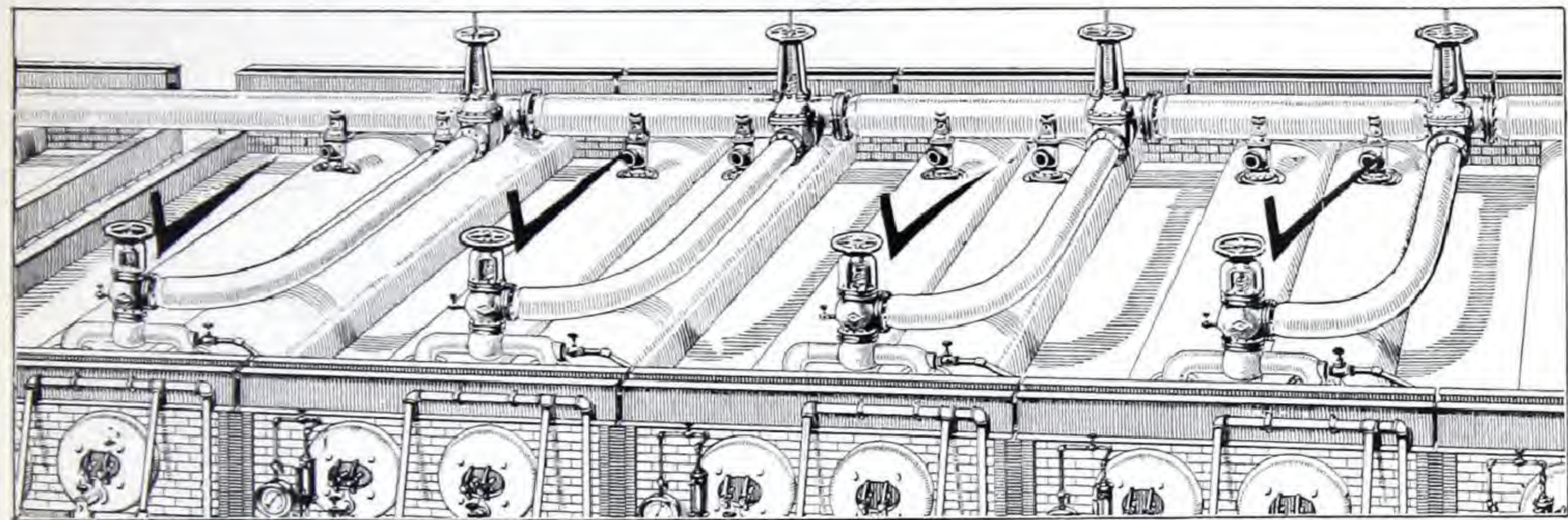


JENKINS IRON BODY VALVES

AUTOMATIC EQUALIZING STOP AND  
CHECK NON-RETURN

Extra Heavy Pattern                      Globe and Angle                      Bronze Mounted  
Regularly Fitted with Bronze Disc for 250 Pounds Steam Working Pressure

Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0222-123456 and 0223-123456



Modern boiler room practice is to use a single-acting non-return and stop valve on each boiler. Jenkins Automatic Equalizing Stop and Check Valves are designed for this service and have proved eminently successful installed on each boiler when the power plant consists of two or more boilers.

Should a tube burst or other rupture suddenly reduce the pressure in a boiler, this valve automatically cuts off the flow of steam from the header to that boiler.

Installed on every boiler, these valves equalize the pressure and cut out the boiler that may be under lower pressure than the others. Furthermore, as the valve can be opened only by the pressure in the boiler on which it is installed, it is impossible to carelessly turn steam into a boiler which is being cleaned. This prevents serious accidents and injury to attendants who may be working in the boiler.



Fig. 551  
Globe, Flanged  
Code: ABVYU

The illustration above shows a typical layout of these valves on a battery of boilers.

The body and yoke are made of cast iron; the spindle is manganese bronze. To prevent chattering, the valve is cushioned by an internal dash pot, made entirely of bronze, which eliminates the danger of sticking, due to corrosion.

These valves can be furnished of cast steel with monel metal seat ring and working parts for pressures up to 300 lbs. and temperatures to 800° F. as shown on page 196.

*Care should be taken to install the valves with the spindle in a vertical position.*



Fig. 553  
Angle, Flanged  
Code: ABVYX

Sizes.....	3	4	5	6	8	10
Fig. 551 and Fig. 553.....	93.00	124.00	165.00	196.00	300.00	495.00
Fig. 551, Wgt., lbs.....	114	183	268	389	640	940
Fig. 553, Wgt., lbs.....	108	179	241	349	535	890

For list prices of Parts, see page 134.



# JENKINS IRON BODY VALVES

## AUTOMATIC EQUALIZING STOP AND CHECK NON-RETURN

Extra Heavy Pattern

Globe and Angle

Bronze Mounted

Regularly Fitted with Bronze Disc for 250 Pounds Steam Working Pressure

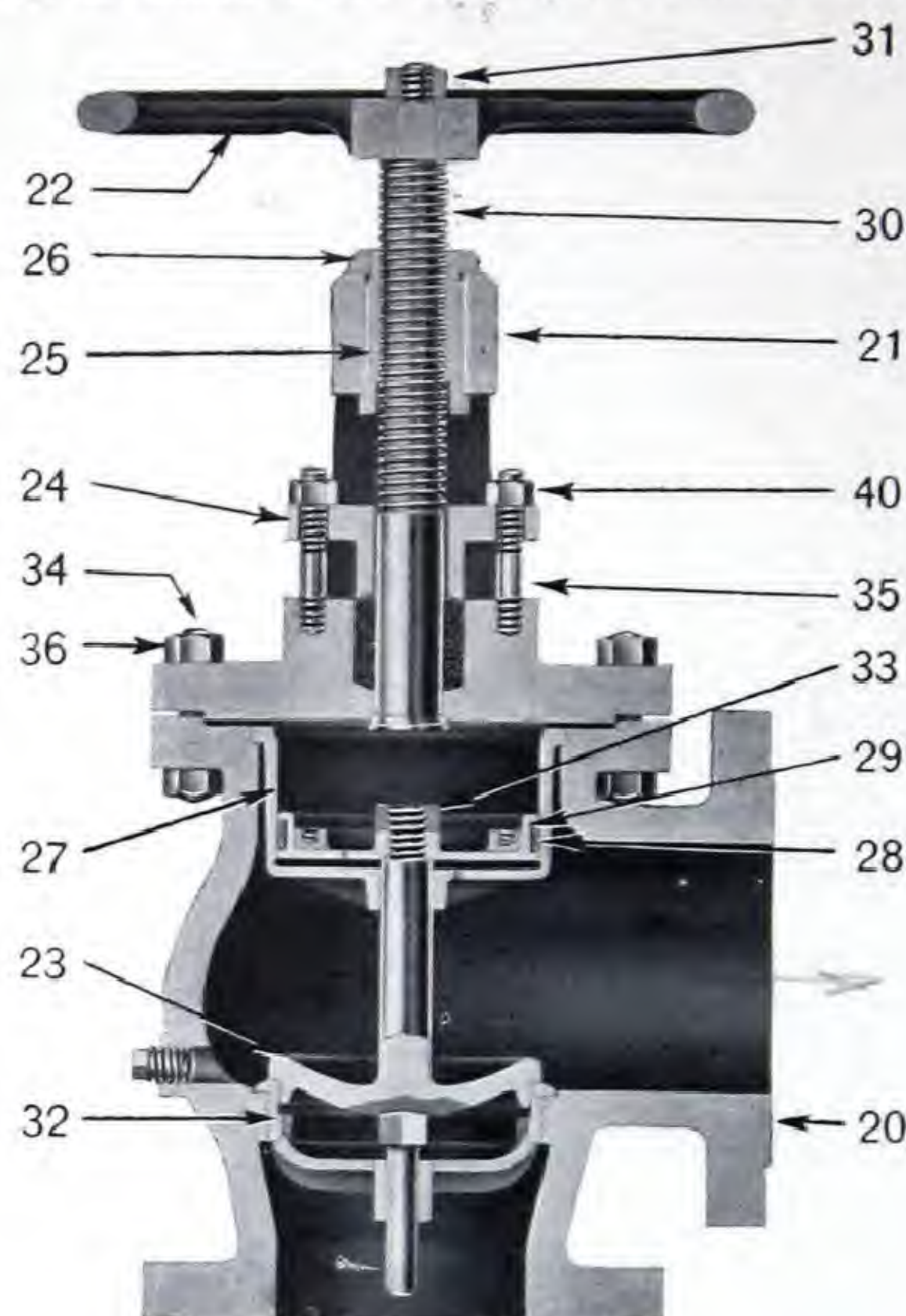


Fig. 553  
Sectional View

### Price List of Parts

Part No.....	Sizes	3	4	5	6	8	10
21. Yoke.....		9.40	12.10	13.95	17.50	29.50	48.95
22. Wheel.....		1.60	2.75	4.45	5.45	8.65	11.60
23. Disc.....		12.75	16.30	25.10	30.10	48.35	80.30
24. Gland.....		.90	1.05	1.60	1.90	3.35	4.70
25. Yoke Nut.....		2.30	2.90	3.65	4.55	7.85	13.35
26. Jam Nut.....		.55	.80	.80	.95	1.50	2.60
27. Dash Pot.....		14.45	18.15	29.65	33.70	54.50	90.55
28. Piston Ring.....		4.00	5.00	7.55	10.05	13.10	21.80
29. Piston.....		7.05	9.10	10.05	11.65	23.95	39.80
30. Spindle.....		6.60	8.45	12.90	15.45	24.15	40.10
31. Wheel Nut.....		.25	.30	.30	.30	.45	.45
32. Seat Ring.....		4.70	6.20	8.25	9.40	17.65	37.25
33. Piston Lock Nut.....		.50	.50	.65	.65	1.30	2.10

### Dimensions, Inches

Sizes.....	3	4	5	6	8	10
Globe, face to face, flanged.....	11 $\frac{3}{4}$	14	15 $\frac{3}{4}$	18	21	23
Angle, centre to face, flanged.....	5 $\frac{7}{8}$	7	7 $\frac{3}{4}$	8 $\frac{3}{4}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$
Diameter of flanges.....	8 $\frac{1}{4}$	10	11	12 $\frac{1}{2}$	15	17 $\frac{1}{2}$
Thickness of flanges.....	1 $\frac{1}{8}$	1 $\frac{1}{4}$	1 $\frac{3}{8}$	1 $\frac{1}{16}$	1 $\frac{5}{8}$	1 $\frac{7}{8}$
Globe, centre to top of hand wheel, open.....	15 $\frac{3}{8}$	18 $\frac{9}{16}$	20 $\frac{13}{16}$	23 $\frac{7}{16}$	26 $\frac{7}{16}$	33 $\frac{3}{8}$
Angle, centre to top of hand wheel, open.....	13 $\frac{7}{8}$	17 $\frac{9}{16}$	19 $\frac{7}{16}$	21 $\frac{13}{16}$	24 $\frac{15}{16}$	29 $\frac{3}{8}$
Diameter of hand wheel.....	10	12	14	16	20	24



JENKINS IRON BODY VALVES

AUTOMATIC EQUALIZING STOP AND  
CHECK NON-RETURN  
Y PATTERN

Extra Heavy

Bronze Mounted

Regularly Fitted with Bronze Disc for 250 Pounds Steam Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0130-123456



Fig. 540  
Globe, Flanged  
Code: ABVXU



Fig. 541  
Angle, Flanged  
Code: ABVXY

Modern boiler room practice is to use a single-acting non-return and stop valve on each boiler. Jenkins Automatic Equalizing Stop and Check Valves are designed for this service and have proved eminently successful installed on each boiler when the power plant consists of two or more boilers.

Should a tube burst or other rupture suddenly reduce the pressure in a boiler, this valve automatically cuts off the flow of steam from the header to that boiler.

Installed on every boiler, these valves equalize the pressure and cut out the boiler that may be under lower pressure than the others. Furthermore, as the valve can be opened only by the pressure in the boiler on which it is installed, it is impossible to carelessly turn steam into a boiler which is being cleaned. This prevents serious accidents and injury to attendants who may be working in the boiler. Valves should be installed so that the boiler pressure comes underneath the disc. These valves can be furnished in cast steel for 300 pounds working steam pressure. Illustrated on page 197.

Sizes.....	3	4	5	6	8	10
Fig. Nos. 540 and 541.....	93.00	124.00	165.00	196.00	300.00	495.00
Fig. 540, Wgt., lbs.....	131	210	307	445	688	1080
Fig. 541, Wgt., lbs.....	123	196	277	405	615	1020

Dimensions, Inches

Sizes.....	3	4	5	6	8	10
Globe, face to face.....	14¾	17	19	21½	26	30
Angle, centre to face.....	6¼	7	7⅞	8¾	10½	12¼
Diameter of flanges.....	8¼	10	11	12½	15	17½
Thickness of flanges.....	1⅛	1¼	1⅜	1⅞	1⅝	1⅞
Globe, centre of body to rim of wheel, open..	15	19½	23⅞	26	35	44
Globe, outlet flange to rim of wheel, open....	6	7	8¼	8½	14	17
Angle, centre of body to rim of wheel, open..	13	15	18	22	27	33
Angle, centre of inlet flange to rim, open.....	15	17	21	24½	31¼	38
Diameter of hand wheel.....	10	12	14	16	20	24



# JENKINS IRON BODY VALVES

## HORIZONTAL, ANGLE, VERTICAL CHECKS Standard Pattern

Bronze Mounted

Renewable Seat Ring

Jenkins Disc

Regularly Fitted with No. 936 Disc for 250 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pressure use No. 119 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0218-123456 and 0215-123456



**Fig. 151**  
Horizontal, Screwed  
Code: ABUAX



**Fig. 152**  
Angle, Screwed  
Code: ABUAZ



**Fig. 152A**  
Vertical, Screwed  
Code: ABUBE

Sizes.....	2	2½	3	3½	4	5	6	8
Fig. 151.....	10.00	13.75	17.50	21.25	25.00	37.50	50.00	100.00
Wgt., lbs.....	17	27	41	52	74	102	164	286
Fig. 152.....	10.00	13.75	17.50	21.25	25.00	37.50	50.00	100.00
Wgt., lbs.....	16	27	40	52	70	100	157	278
Fig. 152A.....	10.00	13.75	17.50	21.25	25.00	37.50	50.00	100.00
Wgt., lbs.....	15	24	35	47	68	100	144	268



**Fig. 153**  
Horizontal, Flanged  
Code: ABUBI



**Fig. 153A**  
Angle, Flanged  
Code: ABUBO



**Fig. 153B**  
Vertical, Flanged  
Code: ABUBT

Sizes.....	2	2½	3	3½	4	5	6	8
Fig. 153.....	12.50	16.25	20.75	25.00	28.75	41.25	54.00	100.00
Wgt., lbs.....	24	36	50	70	94	122	172	308
Fig. 153A.....	12.50	16.25	20.75	25.00	28.75	41.25	54.00	100.00
Wgt., lbs.....	24	38	50	72	88	114	174	300
Fig. 153B.....	12.50	16.25	20.75	25.00	28.75	41.25	54.00	100.00
Wgt., lbs.....	22	32	45	68	87	107	160	292



JENKINS IRON BODY VALVES

HORIZONTAL, ANGLE, VERTICAL CHECKS  
Standard Pattern

Bronze Mounted                      Renewable Seat Ring                      Jenkins Disc  
Regularly Fitted with No. 936 Disc for 250 Pounds Non-Shock Oil, Water,  
Gas Working Pressure  
For 150 Pounds Steam Working Pressure use No. 119 Disc

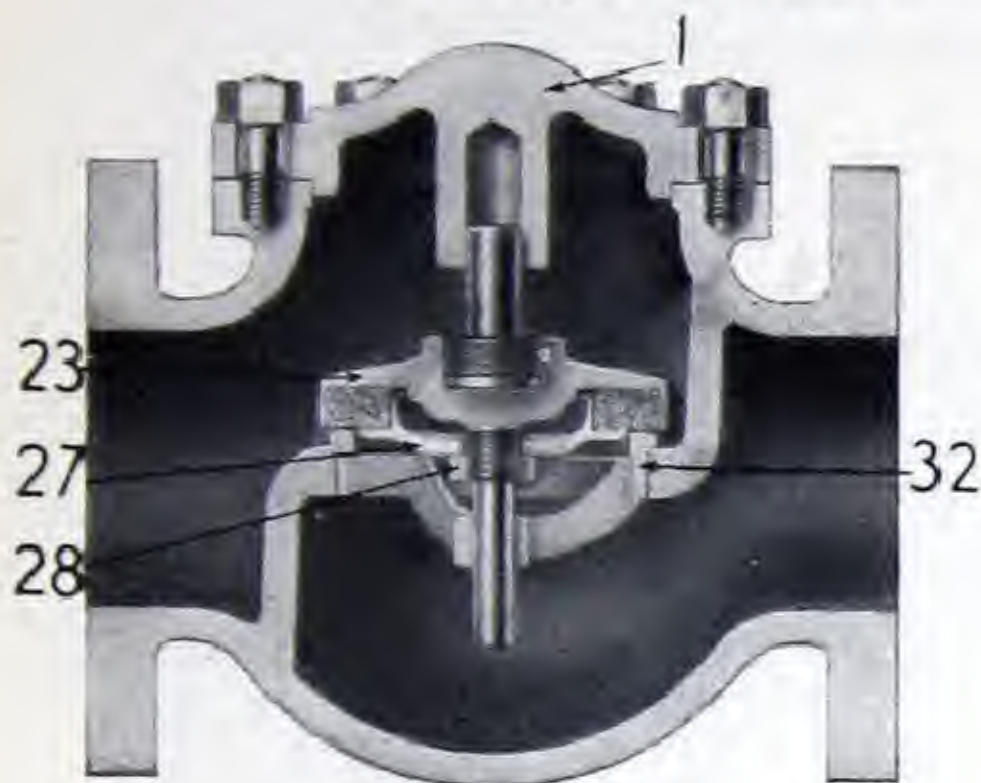


Fig. 153  
Sectional Cut

Description of Parts

- 1. Cover
- 23. Disc Holder
- 27. Disc Plate
- 28. Disc Nut
- 32. Bronze Seat Ring

List Prices of Parts

Sizes.....	2	2½	3	3½	4	5	6	8
Cover, horizontal.....	2.20	2.45	2.95	3.40	3.55	5.45	6.70	*
Cover, angle.....	2.20	2.45	2.95	3.40	3.55	5.45	6.70	*
Cover, vertical.....	2.20	2.45	2.95	3.40	3.55	5.45	6.70	*
Disc holder.....	3.15	4.45	4.60	6.50	7.45	11.65	15.50	*
Disc plate.....		.65	.80	.90	1.10	2.00	2.55	*
Disc nut.....	.30	.30	.30	.30	.30	.30	.30	*
Bronze Seat Ring.....	2.00	3.25	3.25	4.60	4.90	6.60	7.55	*

For list prices of Disc, see page 212.  
\*List prices of parts for 8" check valves on application.

Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8
Face to face, Figs. 151, 152A.....	6½	7¾	9¾	10	12	13¼	16	18¾
Face to face, Figs. 153, 153B.....	7⅛	7½	9¼	10	11¾	13⅛	16	18½
Centre to face, Fig. 152.....	3½	3⅞	4⅛	5	6	6⅝	8	9¾
Centre to face, Fig. 153A.....	3⅞	4½	4⅝	5⅜	5⅞	6½	8	9¼
Diameter of flanges.....	6	7	7½	8½	9	10	11	13½
Thickness of flanges.....	⅝	1⅛	¾	1⅜	1⅝	1⅝	1	1⅛
Centre to top of cap, angle.....	3⅝	4⅛	4⅜	5⅛	5¾	6½	7⅜	8⅜
Centre to top of cap, horizontal.....	3⅝	4⅛	4⅜	5⅛	5¾	6½	7⅜	8⅜
Centre to top of cap, vertical.....	3⅝	4⅛	4⅜	5⅛	5¾	6½	7⅜	8⅜



# JENKINS IRON BODY VALVES

## HORIZONTAL AND ANGLE CHECKS

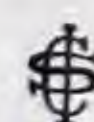
### Extra Heavy Pattern

Regularly Fitted with No. 936 Disc for 350 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

For 250 Pounds Steam Working Pressure use No. 1120 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 0219-123456 and 046-123456



**Fig. 265**  
Horizontal, Screwed  
Code: ABURN



**Fig. 267**  
Angle, Screwed  
Code: ABURT



**Fig. 266**  
Horizontal, Flanged  
Code: ABURO

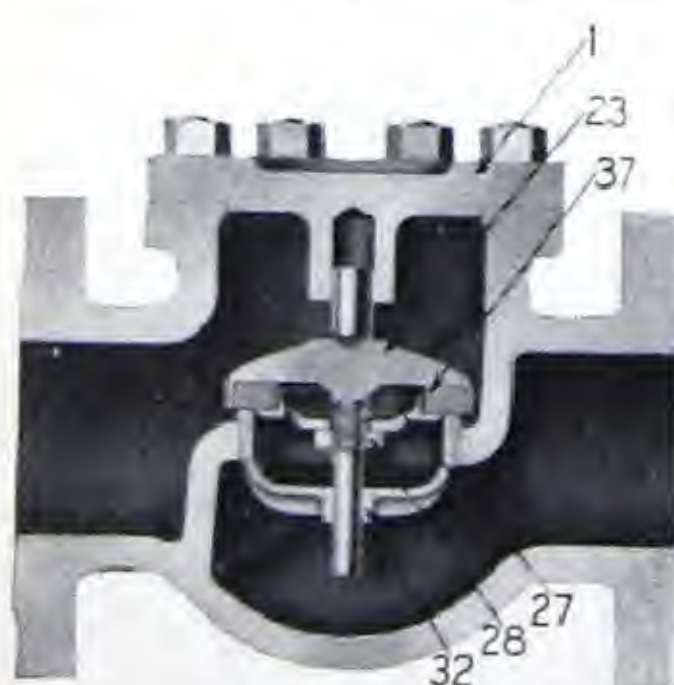


**Fig. 268**  
Angle, Flanged  
Code: ABURV

Sizes.....	2	2½	3	3½	4	5	6
Fig. 265.....	28.00	31.00	39.00	48.00	62.00	84.00	118.50
Wgt., lbs.....	28	40	60	80	100	162	218
Fig. 267.....	28.00	31.00	39.00	48.00	62.00	84.00	118.50
Wgt., lbs.....	29	39	57	76	100	142	196
Fig. 266.....	30.00	35.00	42.00	51.00	66.00	88.00	122.00
Wgt., lbs.....	40	57	80	105	127	190	252
Fig. 268.....	30.00	35.00	42.00	51.00	66.00	88.00	122.00
Wgt., lbs.....	41	57	77	102	127	170	230

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6
Horizontal, face to face, screwed.....	9	9	11½	12⅛	12¾	14¾	17
Horizontal, face to face, flanged.....	9¾	10	11¾	12¾	14	15¾	18
Angle, centre to face, screwed.....	4⅞	5⅛	5⅞	6½	7	7¾	8¾
Angle, centre to face, flanged.....	4⅞	5⅛	5⅞	6½	7	7¾	8¾
Diameter of flanges.....	6½	7½	8¼	9	10	11	12½
Thickness of flanges.....	⅞	1	1⅛	1⅜	1¼	1⅜	1⅞
Centre to top of cover, horizontal.....	4⅝	4⅞	4⅞	5¾	6⅞	7⅞	8⅞
Centre to top of cover, angle.....	3	3⅞	3⅞	4⅞	5⅞	6⅞	7⅞



**Fig. 266**  
Sectional View

### List Prices of Parts

Part No... Sizes	2	2½	3	3½	4	5	6
1. Cover.....	8.85	8.85	9.70	10.30	13.10	14.45	21.40
23. Disc holder.....	9.25	9.35	12.65	17.00	20.30	28.35	40.55
27. Disc plate.....		.65	.80	.90	1.10	2.00	2.60
28. Disc nut....	.35	.35	.35	.35	.35	.35	.35
32. Seat ring....	4.30	4.90	5.25	6.60	6.90	9.20	10.50

For list price of Disc, part 37, see page 212.



JENKINS ALL IRON VALVES

HORIZONTAL AND ANGLE CHECKS

For 175 Pounds Working Pressure  
Recommended for Ammonia, Cyanide, Caustic Soda, Potash and Alkaline Fluids



Fig. 83  
Horizontal,  
Screwed  
Code: ABTOT

Fig. 84  
Horizontal,  
Flanged  
Code: ABTOX

The illustrations show these valves to have bolted bonnets. This applies only to sizes 2" and over. On smaller sizes the cap screws into the body. The valves are usually fitted with a flat solid iron disc. When required they can be supplied with iron disc holder and Jenkins Composition disc. Recommended for service where, on account of corrosion, bronze mountings cannot be used.



Fig. 85  
Angle, Screwed  
Code: ABTPA

Fig. 86  
Angle, Flanged  
Code: ABTPI

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8
Fig. 83.....	Prices on Application.....												
Wgt., lbs. & oz.	1-0	1-6	2-1	2-13	4-6	18-0	28-0	42-0	54-0	76-0	105-0	168-0	293-0
Fig. 84.....	Prices on Application.....												
Wgt., lbs. & oz.	.....	.....	.....	.....	.....	25-0	37-0	51-0	72-0	96-0	125-0	175-0	315-0
Fig. 85.....	Prices on Application.....												
Wgt., lbs. & oz.	0-15	1-7	2-0	3-0	4-4	17-0	28-0	41-0	54-0	72-0	103-0	163-0	285-0
Fig. 86.....	Prices on Application.....												
Wgt., lbs. & oz.	.....	.....	.....	.....	.....	25-0	39-0	57-0	73-0	90-0	116-0	177-0	307-0

Dimensions, Inches

Sizes.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8
Horizontal, face to face, screwed.....	2 7/8	3 9/16	4 1/8	4 3/4	5 1/4	6 1/2	7 3/4	9 3/8	10	12	13 1/4	16	18 3/4
Horizontal, face to face, flanged.....	.....	.....	.....	.....	.....	7 1/8	7 1/2	9 1/4	10	11 3/4	13 1/8	16	18 1/2
Angle, centre to face, screwed.	1 15/32	1 13/16	2 1/16	2 5/16	2 1/2	3 1/2	3 7/8	4 11/16	5	6	6 5/8	8	9 3/8
Angle, centre to face, flanged.	.....	.....	.....	.....	.....	3 7/8	4 1/2	4 5/8	5 3/8	5 7/8	6 1/2	8	9 1/4
Diameter of flanges.....	.....	.....	.....	.....	.....	6	7	7 1/2	8 1/2	9	10	11	13 1/2
Thickness of flanges.....	.....	.....	.....	.....	.....	5/8	1 1/16	3/4	13/16	15/16	15/16	1	1 1/8
Horizontal, centre to top of cap.....	1 13/16	2 3/16	2 7/16	2 7/8	3 3/16	3 5/8	4 1/8	4 13/16	5 1/8	5 3/4	6 1/2	7 3/16	8 13/16
Angle, centre to top of cap...	1 3/4	1 15/16	2 3/8	2 9/16	2 7/8	3 5/8	4 1/8	4 13/16	5 1/8	5 3/4	6 1/2	7 3/16	8 13/16



# JENKINS IRON BODY VALVES

## SWING CHECK Standard Pattern

2" to 6" Solid Bronze Disc

Renewable Bronze Seat Ring

8" and up, Cast Iron Disc with Bronze Face

2" to 14" suitable for 150 Pounds Water Working Pressure,  
300 Pounds Hydrostatic Test

16" to 24" suitable for 125 Pounds Water Working Pressure,  
250 Pounds Hydrostatic Test

These valves can also be fitted with leather faced discs when required



**Fig. 588**  
Swing Check, Screwed  
Code: ABWAZ



**Fig. 587**  
Swing Check, Flanged  
Code: ABWAY



**Fig. 589**  
Swing Check, Hub Ends  
Code: ABWBA

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8
Face to face, screwed.....	8	8	9	10	11	12 <sup>7</sup> / <sub>16</sub>	14 <sup>3</sup> / <sub>4</sub>	18
Face to face, flanged.....	8 <sup>5</sup> / <sub>8</sub>	8 <sup>5</sup> / <sub>8</sub>	9 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	12 <sup>7</sup> / <sub>8</sub>	13 <sup>9</sup> / <sub>16</sub>	15 <sup>1</sup> / <sub>8</sub>	18
End to end, hub.....			13	.....	15 <sup>1</sup> / <sub>2</sub>	18	18 <sup>3</sup> / <sub>4</sub>	23 <sup>1</sup> / <sub>4</sub>
Diameter of flanges.....	6	7	7½	8½	9	10	11	13½
Thickness of flanges.....	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>	¾	1 <sup>3</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1	1 <sup>1</sup> / <sub>8</sub>
Diameter inside of hub.....			4¾	.....	5 <sup>13</sup> / <sub>16</sub>	6¾	7 <sup>29</sup> / <sub>32</sub>	10 <sup>7</sup> / <sub>64</sub>
Depth of recess, hub.....			3	.....	3½	3½	3½	4
Thickness of hub.....			1¼	.....	1 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>13</sup> / <sub>32</sub>	1½
Diameter outside of hub end.....			7¼	.....	8 <sup>7</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>8</sub>	10 <sup>23</sup> / <sub>32</sub>	13 <sup>1</sup> / <sub>8</sub>
Centre to top of bonnet.....	5 <sup>5</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	5 <sup>13</sup> / <sub>16</sub>	6½	8 <sup>5</sup> / <sub>8</sub>	9 <sup>11</sup> / <sub>16</sub>	10 <sup>13</sup> / <sub>16</sub>	13 <sup>5</sup> / <sub>16</sub>

### Dimensions, Inches

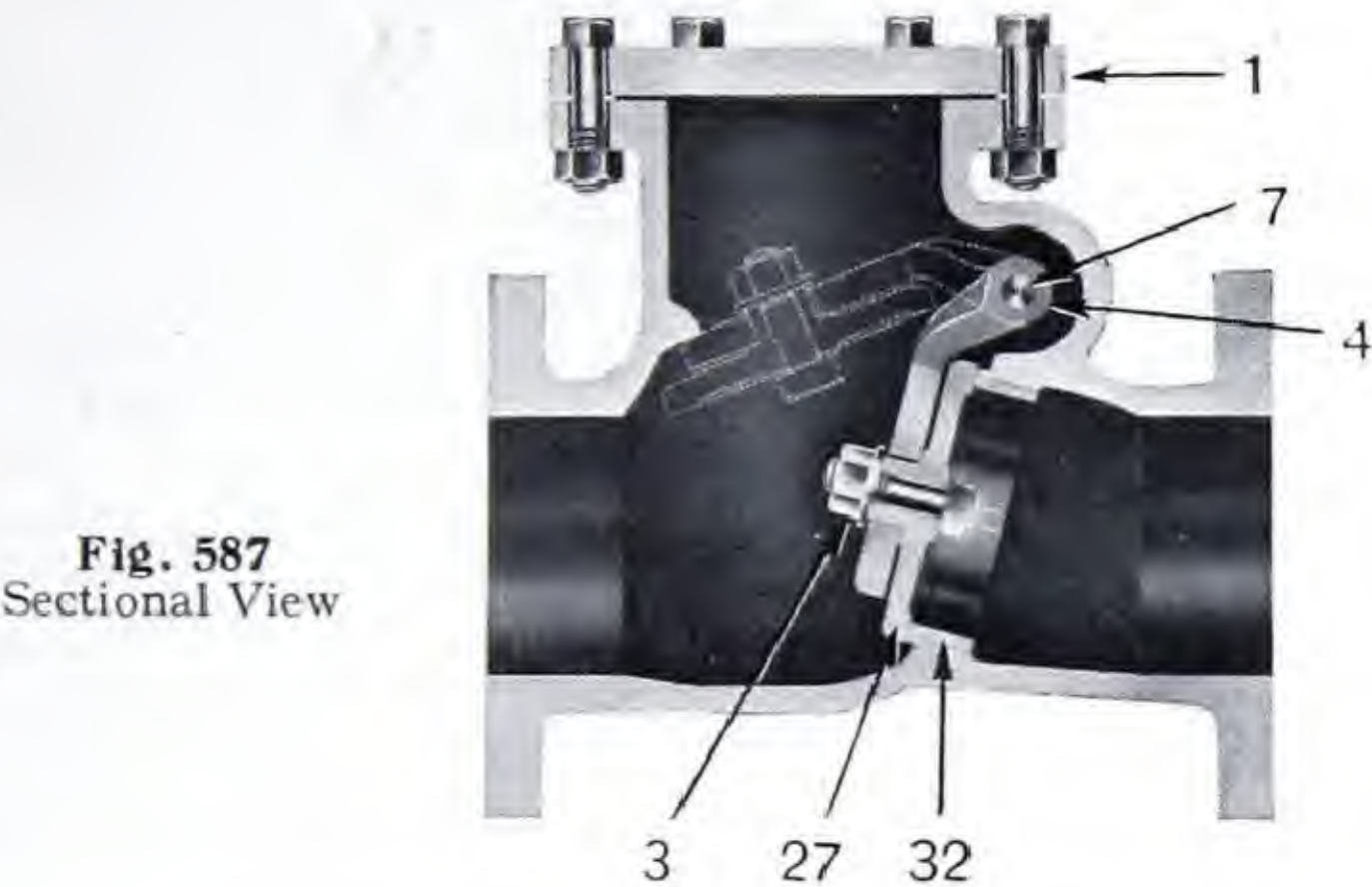
Sizes.....	10	12	14	16	18	20	24
Face to face, screwed.....							
Face to face, flanged.....	23¼	24 <sup>5</sup> / <sub>8</sub>	25	27½	30½	32½	38
End to end, hub.....	27	29 <sup>3</sup> / <sub>8</sub>	26¾	29	32¼	34¾	41
Diameter of flanges.....	16	19	21	23½	25	27½	32
Thickness of flanges.....	1 <sup>3</sup> / <sub>16</sub>	1¼	1 <sup>3</sup> / <sub>8</sub>	1 <sup>7</sup> / <sub>16</sub>	1 <sup>9</sup> / <sub>16</sub>	1 <sup>11</sup> / <sub>16</sub>	1 <sup>7</sup> / <sub>8</sub>
Diameter inside of hub.....	12 <sup>3</sup> / <sub>16</sub>	14 <sup>5</sup> / <sub>16</sub>	16 <sup>15</sup> / <sub>32</sub>	18 <sup>13</sup> / <sub>16</sub>	20 <sup>15</sup> / <sub>16</sub>	23 <sup>1</sup> / <sub>16</sub>	27 <sup>5</sup> / <sub>16</sub>
Depth of recess, hub.....	4	4	4	4	4	4	4
Thickness of hub.....	1 <sup>5</sup> / <sub>8</sub>	1 <sup>23</sup> / <sub>32</sub>	1 <sup>27</sup> / <sub>32</sub>	1 <sup>29</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>8</sub>	2 <sup>9</sup> / <sub>32</sub>	2½
Diameter outside of hub end.....	15 <sup>7</sup> / <sub>16</sub>	17¾	20 <sup>5</sup> / <sub>32</sub>	22 <sup>5</sup> / <sub>8</sub>	25 <sup>3</sup> / <sub>16</sub>	27 <sup>5</sup> / <sub>8</sub>	32 <sup>5</sup> / <sub>16</sub>
Centre of body to top of bonnet.....	12 <sup>11</sup> / <sub>16</sub>	16	16½	17 <sup>7</sup> / <sub>8</sub>	20½	22 <sup>5</sup> / <sub>8</sub>	24 <sup>13</sup> / <sub>16</sub>



JENKINS IRON BODY VALVES

SWING CHECK  
Standard Pattern

2" to 6" Solid Bronze Disc  
Renewable Bronze Seat Ring  
8" and up Cast Iron Disc with Bronze Face  
2" to 14" suitable for 150 Pounds Water Working Pressure,  
300 Pounds Hydrostatic Test  
16" to 24" suitable for 125 Pounds Water Working Pressure,  
250 Pounds Hydrostatic Test



Sizes.....	2	2½	3	3½	4	5	6	8
Fig. 587, flanged.....	13.00	14.50	17.00	21.00	24.00	34.00	41.00	75.00
Wgt., lbs.....	31	35	47	61	89	113	158	262
Fig. 588, screwed.....	11.00	12.00	13.50	17.50	20.00	30.00	36.00	70.00
Wgt., lbs.....	29	26	37	49	72	105	143	225
Fig. 589, hub ends.....			19.00		27.00	38.00	45.00	82.50
Wgt., lbs.....			56		98	132	183	281

Sizes.....	10	12	14	16	18	20	24
Fig. 587, flanged.....	115.00	168.00	340.00	450.00	600.00	700.00	1000.00
Wgt., lbs.....	494	656	874	1123	1410	1745	2536
Fig. 588, screwed.....	110.00	160.00					
Wgt., lbs.....	412	560					
Fig. 589, hub ends.....	125.00	185.00	340.00	450.00	600.00	700.00	1000.00
Wgt., lbs.....	507	690					

Larger sizes, prices on application. See also page 142.

List Prices of Parts

Part No.....	Sizes	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
1. Cover.....		1.35	1.35	1.70	2.00	2.70	3.00	3.30	7.00	11.00	15.00	Prices on Application				
2. Side plugs (Pair)...		.30	.30	.60	.65	.65	.90	.90	2.50	4.50	5.75					
3. Hanger nut.....		.15	.15	.15	.15	.15	.40	.40	.40	1.20	1.20					
4. Hanger.....		.75	.75	1.20	1.20	1.50	2.75	3.25	6.50	7.00	10.00					
7. Hanger pin.....		.15	.15	.15	.15	.30	.50	.50	.90	2.25	2.50					
27. Clapper.....		2.60	2.60	3.35	3.50	3.75	7.00	8.00	16.00	22.50	27.50					
32. Seat ring.....		.70	.70	1.20	1.60	2.60	3.50	4.00	8.00	17.00	27.50					



# JENKINS IRON BODY VALVES

## MULTIPLE DISC SWING CHECK Standard Pattern

Bronze Mounted

Cast Iron Bronze Faced Discs

For 150 Pounds Water Working Pressure



Inlet  
Body of  
Fig. 483

Fig. 484  
Flanged with by-pass  
Code: ABVSD



Fig. 483  
Flanged  
Code: ABVSC

Fig. 485  
Hub end  
Code: ABVSE

Fig. 486  
Hub end with by-pass  
Code: ABVSH

Jenkins Multiple Disc Swing Check Valves are adaptable for various purposes, and are particularly desirable for service in water works and sewerage plants. There are no pockets for the lodging of stones or gravel, the current washing away all foreign matter. The number of gates or discs vary according to the size of valve and the conditions under which it will be used. The gates or discs are easily accessible for repairs and can be removed through the manhole.

### Dimensions, Inches

Sizes.....	30	36	42	48
Body, face to face.....	54	64	72	82
Diameter of flanges.....	38 $\frac{3}{4}$	46	53	59 $\frac{1}{2}$
Thickness of flanges.....	2 $\frac{1}{8}$	2 $\frac{3}{8}$	2 $\frac{5}{8}$	2 $\frac{3}{4}$
Diameter of centre flanges.....	66	76	88	105
Manhole cover.....	12 x 18	12 x 18	12 x 20	12 x 20

Prices on Application



# JENKINS IRON BODY VALVES

## SWING CHECK Underwriters' Pattern

2½" to 6" Solid Bronze Disc                      Renewable Bronze Seat Ring  
8" and up Cast Iron Disc with Bronze Faces

For 150 Pounds Water Working Pressure, 300 Pounds Hydrostatic Test

Conform to the specifications and are approved by the National Board of Fire Underwriters and the Associated Factory Mutual Fire Insurance Companies. They are marked "FM" and "JBU".



Fig. 478  
Swing Check, Screwed  
Code: ABVRS

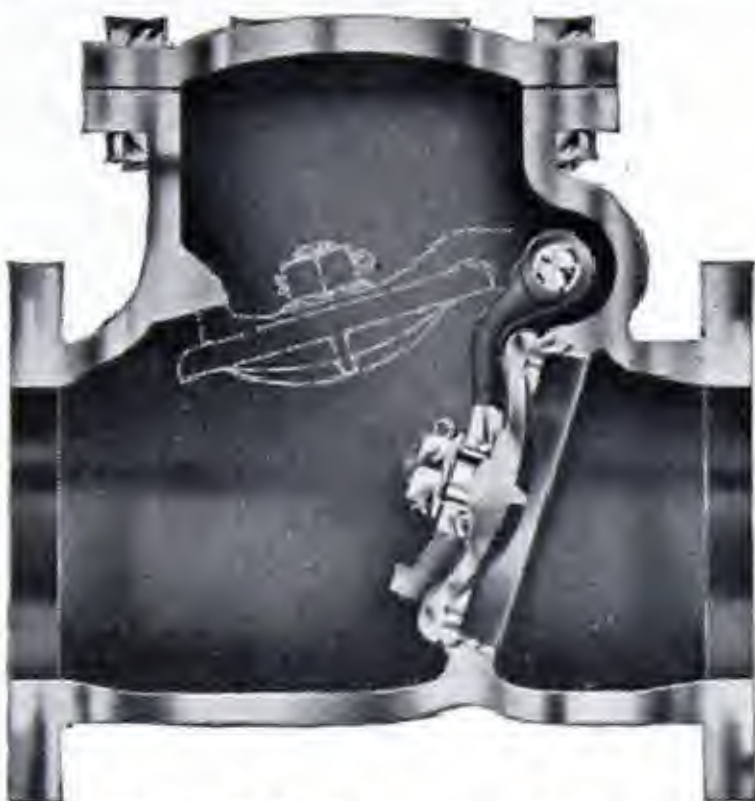


Fig. 477 Sectional View  
Swing Check, Flanged  
CODE: ABVRO



Fig. 479  
Swing Check, Hub Ends  
Code: ABVRU

Sizes.....	2½	3	3½	4	5	6	8	10	12
Fig. 477.....	14.50	17.00	21.00	24.00	34.00	41.00	75.00	115.00	168.00
Wgt., lbs.....	35	47	61	89	113	158	262	494	656
Fig. 478.....	12.00	13.50	17.50	20.00	30.00	36.00	.....	.....	.....
Wgt., lbs.....	26	37	49	72	105	143	.....	.....	.....
Fig. 479.....	.....	19.00	.....	27.00	38.00	45.00	82.50	125.00	185.00
Wgt., lbs.....	.....	56	.....	98	132	183	281	507	690

### Dimensions, Inches, Figs. 477 and 478

Sizes.....	2½	3	3½	4	5	6	8	10	12
A.....	8	9	10	11	12 <sup>7</sup> / <sub>16</sub>	14 <sup>3</sup> / <sub>4</sub>	.....	.....	.....
B.....	8 <sup>5</sup> / <sub>8</sub>	9 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	12 <sup>7</sup> / <sub>8</sub>	13 <sup>9</sup> / <sub>16</sub>	15 <sup>1</sup> / <sub>8</sub>	18	23 <sup>1</sup> / <sub>4</sub>	24 <sup>5</sup> / <sub>8</sub>
C.....	7	7½	8½	9	10	11	13½	16	19
D.....	1 <sup>1</sup> / <sub>16</sub>	¾	1 <sup>3</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1	1 <sup>1</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>4</sub>
E.....	5 <sup>5</sup> / <sub>16</sub>	5 <sup>13</sup> / <sub>16</sub>	6½	8 <sup>5</sup> / <sub>8</sub>	9 <sup>11</sup> / <sub>16</sub>	10 <sup>13</sup> / <sub>16</sub>	13 <sup>5</sup> / <sub>16</sub>	12 <sup>11</sup> / <sub>16</sub>	16

A-Face to face, screwed. B-Face to face, flanged. C-Diameter of flanges. D-Thickness of flanges. E-Centre to top of bonnet.

### Dimensions, Inches, Fig. 479

Sizes.....	3	4	5	6	8	10	12
A.....	13	15½	18	18¾	23¼	27	29¾
B.....	4¾	5 <sup>13</sup> / <sub>16</sub>	6¾	7 <sup>29</sup> / <sub>32</sub>	10 <sup>7</sup> / <sub>64</sub>	12 <sup>3</sup> / <sub>16</sub>	14 <sup>5</sup> / <sub>16</sub>
C.....	3	3½	3½	3½	4	4	4
D.....	1¼	1 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>13</sup> / <sub>32</sub>	1½	1 <sup>5</sup> / <sub>8</sub>	1 <sup>23</sup> / <sub>32</sub>
E.....	7¼	8 <sup>7</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>8</sub>	10 <sup>23</sup> / <sub>32</sub>	13 <sup>1</sup> / <sub>8</sub>	15 <sup>7</sup> / <sub>16</sub>	17¾
F.....	5 <sup>13</sup> / <sub>16</sub>	8 <sup>5</sup> / <sub>8</sub>	9 <sup>11</sup> / <sub>16</sub>	10 <sup>13</sup> / <sub>16</sub>	13 <sup>5</sup> / <sub>16</sub>	12 <sup>11</sup> / <sub>16</sub>	16

A-End to end. B-Diameter inside of hub. C-Depth of recess. D-Thickness of hub. E-Diameter outside of hub end. F-Centre of body to top of bonnet.

These valves can be supplied with Aluminum clapper and hanger for heating systems. Prices on application.

For price list of Parts, see page 141.



# JENKINS IRON BODY VALVES

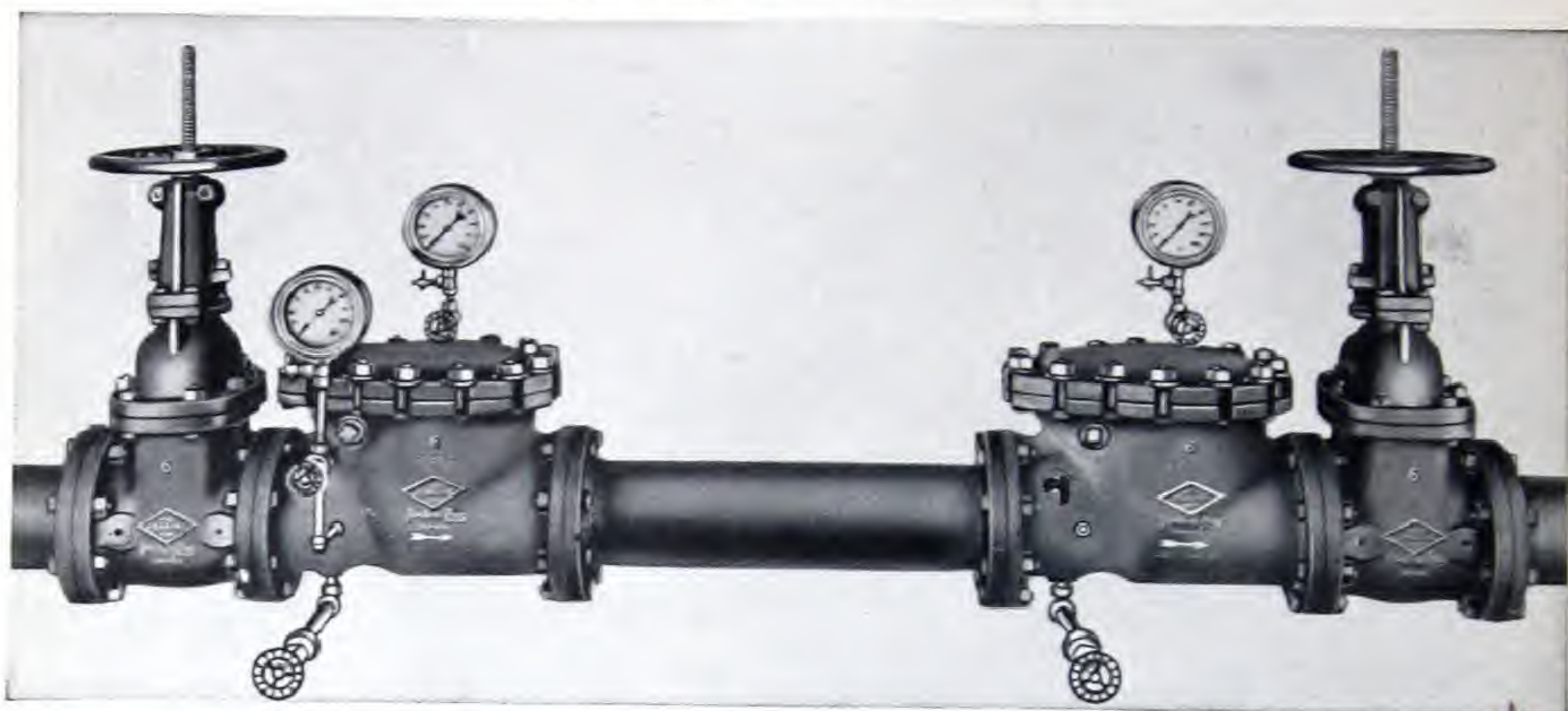
## SPECIAL TYPE SWING CHECK VALVES

Approved by the Provincial Board of Health of Ontario

Bronze Seat Ring

Jenkins Disc

Fitted with Jenkins Rubber Composition Disc for 150 Pounds  
Water Working Pressure



*Double Check Valve equipment with spacer, incorporating two Fig. 482 Jenkins Special Type Iron Body Check Valves, gauges, valves for testing and draining, cocks, fittings and nipples and two Fig. 825 Jenkins Underwriters' Pattern Iron Body Gate Valves*

**Fig. 482**  
**Swing Check, Flanged**  
**Code: ABVSA**

Jenkins Iron Body Special Type Swing Check Valves are made in sizes 2", 3" and 4" for use when approved by Provincial Boards of Health on auxiliary supplies, etc., or in Laundries, Dye Houses, Pulp and Paper Mills and other establishments using water softeners or other equipment.

The usual method of installation is as illustrated and consists of two Jenkins Special Type Swing Check Valves, Bronze Globe and Angle Valves, Gauges, Test Cocks, etc., and two Jenkins Underwriters' Approved Iron Body Gate Valves. This installation should be made where the valves will be readily accessible for examination and test. The tightness of each Check Valve can be verified in a few moments. When designing these Valves, consideration was given to the frequent examination to which they are subjected. To simplify the inspection, the bonnet is slotted for bolts, which permits quick and easy removal. It is not necessary to remove the clapper; the design allows it to be swung entirely out of the body without withdrawing the hanger pin, in which position it can be readily examined.

These valves may be bolted together, thus providing a space between discs of 9 inches on 2" size, 10<sup>3</sup>/<sub>4</sub> inches on 3" size, 13 inches on 4" size, 18 inches on 6" size, 20 inches on 8" size and 23 inches on 10" size, which is sufficient to prevent any ordinary material found in a pipe from holding both discs open at the same time. To still further improve the efficiency, a piece of pipe or spacer, from 3 to 5 feet long, installed between the checks, is recommended. With this arrangement, even a piece of rope or a stick would not be likely to extend from one check to the other.

**Prices Fig. 482 on Application**

Also made in All Bronze, see page 57.



JENKINS IRON BODY VALVES

SWING CHECK  
Extra Heavy Pattern

Bronze Mounted                      Renewable Seat Ring                      Jenkins Disc

Regularly Fitted with No. 936 Disc for 350 Pounds Non-Shock Oil, Water,  
Gas Working Pressure

For 250 Pounds Steam Working Pressure use No. 1120 Disc

Conforming to Canadian Interprovincial Specifications  
Registration Number 0221-123456



Fig. 338  
Swing Check, Screwed  
Code: ABVAZ

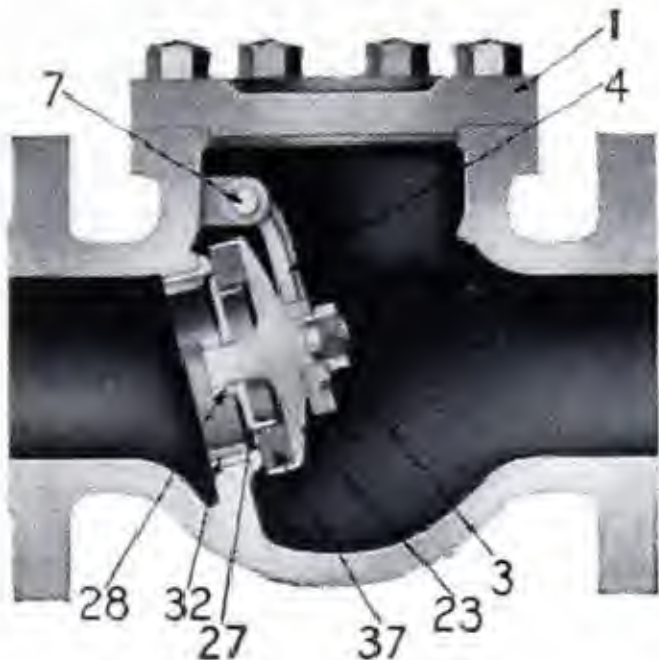


Fig. 339  
Sectional View



Fig. 339  
Swing Check, Flanged  
Code: ABVBG

Sizes.....	2	2½	3	4	5	6	8
Fig. 338.....	25.00	33.00	46.00	68.00	89.00	109.00	165.00
Wgt., lbs.....	24	38	54	95	147	209	394
Fig. 339.....	28.00	37.00	50.00	73.00	94.00	116.00	173.00
Wgt., lbs.....	37	57	77	125	172	247	425

3½" can also be supplied. Price on application.

Dimensions, Inches

Sizes.....	2	2½	3	4	5	6	8
Face to face, screwed.....	7¾	9	11½	12¾	15	17	19½
Face to face, flanged.....	9¼	10¾	11¾	13¾	15½	17	20
Diameter of flanges.....	6½	7½	8¼	10	11	12½	15
Thickness of flanges.....	7⁄8	1	1⅛	1¼	1⅜	1⅞	1⅝
Centre to top of cover.....	4¼	4¾	4⅞	6	6¾	7⅝	9⅛

List Prices of Parts

Part No.....	Sizes	2	2½	3	4	5	6	8
1. Cover.....		3.50	3.90	5.80	6.80	9.90	13.80	21.65
2. Side plugs (Pair).....		.35	.35	.35	.35	.50	.55	.85
3. Hanger nut.....		.35	.35	.35	.35	.50	.50	.85
4. Hanger.....		1.65	3.10	3.10	3.45	3.85	4.55	7.20
7. Hanger pin.....		.20	.35	.35	.55	1.60	1.95	3.10
23. Disc holder.....		2.35	4.20	5.30	12.75	14.70	15.45	24.25
27. Disc plate.....			.65	.80	1.10	2.00	2.60	6.50
28. Disc plate nut.....		.35	.35	.35	.35	.35	.35	.35
32. Seat ring.....		4.30	4.95	5.25	6.90	9.20	10.50	16.00

For list prices of Disc, part 37, see pages 212 and 213.



# JENKINS IRON BODY VALVES

## Y or BLOW-OFF Standard Pattern

Bronze Mounted

Renewable Seat Ring

Jenkins Disc

Regularly Fitted with No. 110-H Disc for 250 Pounds Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pressure Use No. 119 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Number 4228-123456



Fig. 296  
Y or Blow-Off, Screwed  
Code: ABUWE



Fig. 297  
Y or Blow-Off, Flanged  
Code: ABUWF

Sizes	2	2½	3
Fig. 296	16.00	22.00	29.00
Wgt., lbs.	26	50	62
Fig. 297	19.00	27.00	34.00
Wgt., lbs.	33	62	70

Prices of Figs. 296 and 297, sizes 3½" to 8", on application.

### Dimensions, Inches

Sizes	2	2½	3	3½	4	5	6	8
Face to face, screwed	8	9½	11½	13	13	15	16¾	21¼
Face to face, flanged	9½	11	12¾	15	14¾	16½	18¾	23½
Inlet flange to rim of wheel, open	4½	5¾	6¾	5¾	9½	8½	9½	10¾
Inlet hexagon to rim of wheel, open	6¾	7¾	6¾	7½	10½	10	11½	12¾
Diameter of flanges	6	7	7½	8½	9	10	11	13½
Thickness of flanges	⅝	⅞	¾	⅞	⅞	⅞	1	1½
Centre of body to rim of wheel, open	12	14	16	16½	20¼	22	24½	29¼
Diameter of hand wheel	6	7	8	8	9	10	12	14



# JENKINS IRON BODY VALVES

## Y or BLOW-OFF Standard Pattern

Bronze Mounted

Renewable Seat Ring

Jenkins Disc

Regularly Fitted with No. 110-H Disc for 250 Pounds Oil, Water,  
Gas Working Pressure

For 150 Pounds Steam Working Pressure Use No. 119 Disc

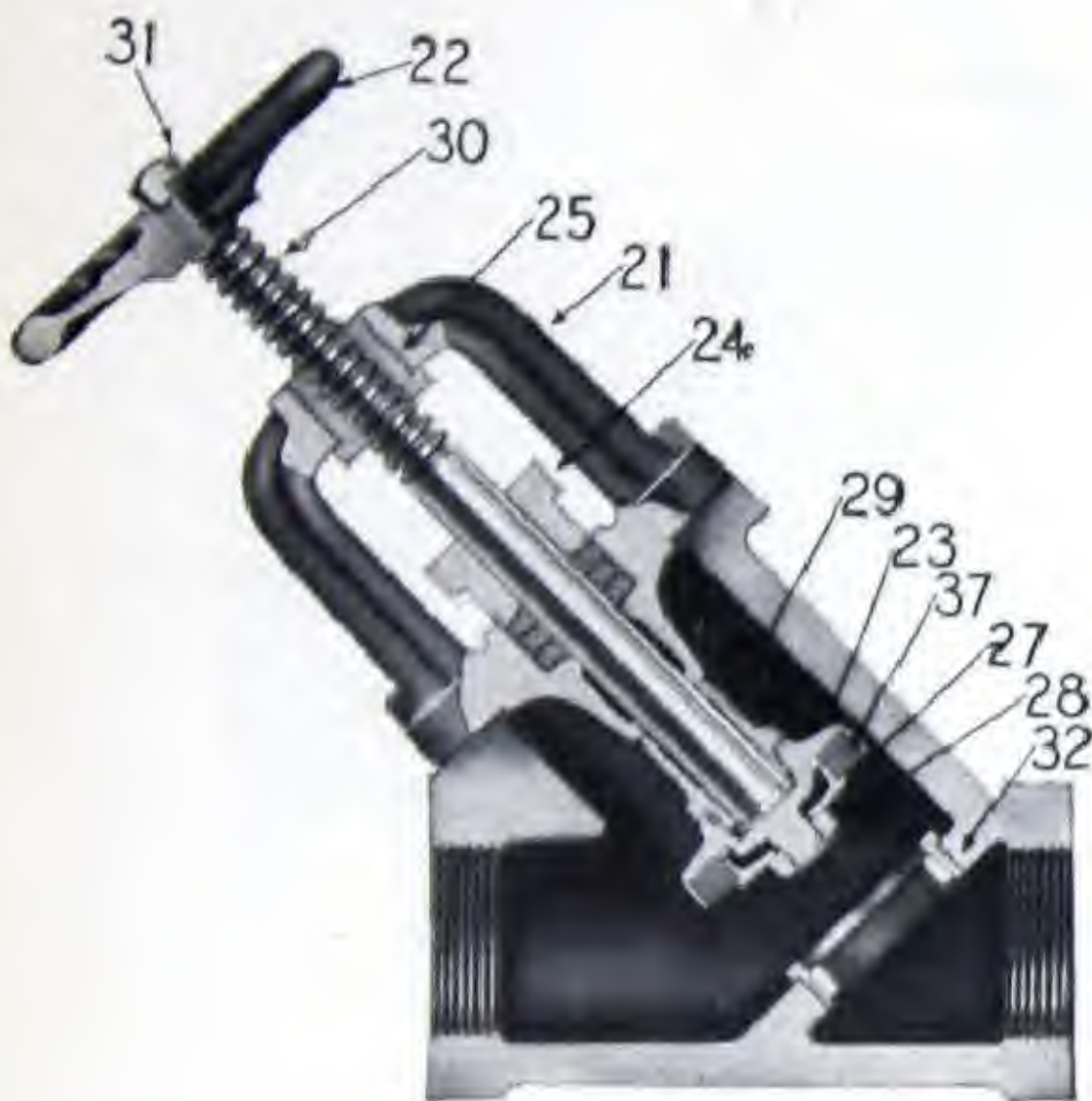


Fig. 296  
Sectional View

These valves allow an opening practically in line with the pipe, and have the additional advantages of the Jenkins Renewable Disc and Renewable Bronze Seat Ring which permit easy repairs and a tight valve without regrinding. The spindle is on a 45° angle, which makes the hand wheel easily accessible in close quarters.

### List Prices of Parts

Part No. .... Sizes	2	2½	3
21. Yoke.....	3.85	4.45	6.40
22. Wheel.....	.50	.50	.70
23. Disc holder .....	1.00	1.90	2.30
24. Gland.....	.40	.40	.50
25. Yoke nut .....	.75	.75	.85
27. Disc plate .....	.....	.65	.80
28. Disc nut .....	.35	.35	.35
29. Lock nut.....	.25	.55	.55
30. Spindle.....	3.55	4.45	5.75
31. Wheel nut .....	.10	.30	.30
32. Bronze seat ring.....	1.35	1.35	2.00

For list price of Disc, part 37, see page 212.



# JENKINS IRON BODY VALVES

## Y OR BLOW-OFF Extra Heavy Pattern

Bronze Mounted

Renewable Seat Ring

Jenkins Disc

Regularly Fitted with No. 80-A Disc for 400 Pounds Oil, Water, Gas  
Working Pressure

For 250 Pounds Steam Working Pressure Use No. 1120 Disc



Conforming to Canadian Interprovincial Specifications  
Registration Number 0229-123456

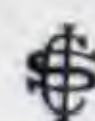


Fig. 336  
Y or Blow-Off, Screwed  
Code: ABVAU



Fig. 337  
Y or Blow-Off, Flanged  
Code: ABVAW

Sizes .....	2	2½	3
Fig. 336 .....	30.00	38.00	49.00
Wgt., lbs. ....	45	76	95
Fig. 337 .....	34.00	45.00	60.00
Wgt., lbs. ....	58	87	106

### Dimensions, Inches

Sizes .....	2	2½	3
Face to face, screwed .....	9	10 <sup>3</sup> / <sub>16</sub>	12
Face to face, flanged .....	11¼	13	14
Face of inlet flange to rim of wheel, open .....	6 <sup>3</sup> / <sub>8</sub>	6¾	8¼
Face of inlet hexagon to rim of wheel, open .....	8 <sup>5</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>8</sub>	10 <sup>3</sup> / <sub>8</sub>
Diameter of flanges .....	6½	7½	8¼
Thickness of flanges .....	7/8	1	1 <sup>1</sup> / <sub>8</sub>
Centre of body to rim of wheel, open .....	15	16 <sup>5</sup> / <sub>8</sub>	19
Diameter of hand wheel .....	7	8	10



JENKINS IRON BODY VALVES

Y OR BLOW-OFF  
Extra Heavy Pattern

Bronze Mounted                      Renewable Seat Ring                      Jenkins Disc

Regularly Fitted with No. 80-A Disc for 400 Pounds Oil, Water, Gas  
Working Pressure

For 250 Pounds Steam Working Pressure Use No. 1120 Disc

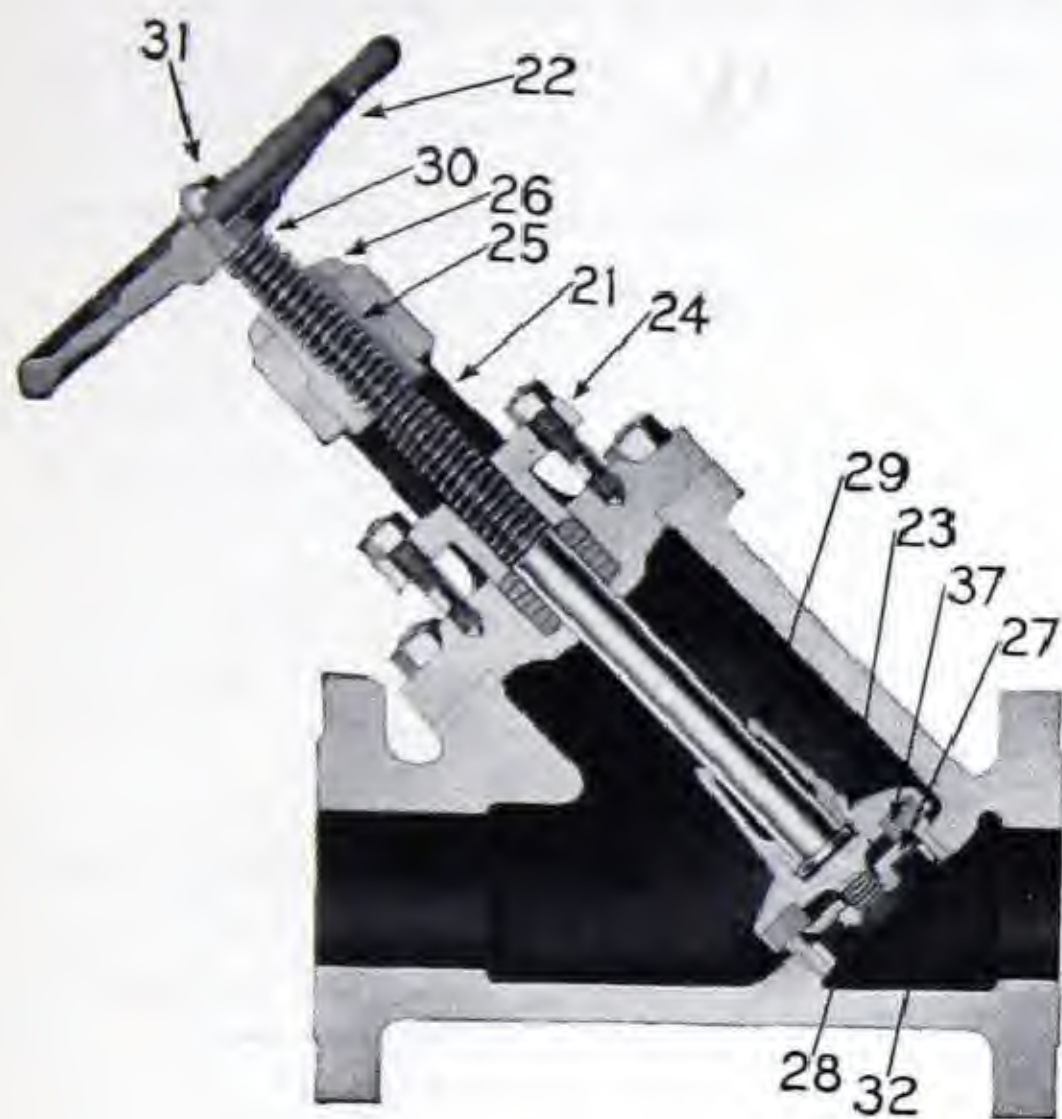


Fig. 337  
Sectional Cut

These valves allow an opening practically in line with the pipe, and have the additional advantages of the Jenkins Renewable Disc and Renewable Seat Ring which permit easy repair and a tight valve without regrinding. The spindle is on a 45° angle, which makes the hand wheel easily accessible in close quarters.

List Prices of Parts

Part No.	Sizes	2	2½	3
21. Yoke.....		6.10	6.40	7.05
22. Wheel.....		1.30	1.45	1.75
23. Disc Holder.....		4.00	4.80	6.80
24. Gland.....		.60	.60	1.00
25. Yoke Nut.....		2.00	2.00	2.60
26. Jam Nut.....		.45	.45	.60
27. Disc Plate.....		....	.65	.80
28. Disc Nut.....		.35	.35	.35
29. Lock Nut.....		.60	.60	.75
30. Spindle.....		5.40	7.25	10.20
31. Wheel Nut.....		.35	.35	.35
32. Bronze Seat Ring.....		4.30	4.90	5.25

For list price of Disc, part 37, see Page 212.



# JENKINS IRON BODY VALVES

## WEIGHTED CHECK WITH OUTSIDE LEVER Straightway Pattern

Bronze Mounted

Jenkins Disc

Regularly Fitted With No. 936 Disc for Working Pressures to 25 Pounds



**Fig. 156**  
Weighted Check with Outside  
Lever, Flanged  
Code: ABUCB

These valves have full straightway opening through the valve seat equal to the inside diameter of the pipe. The outside lever serves as an indicator of the internal movement of the valve. By attaching the weight to the lever, the internal parts of the valve can be counterbalanced in accordance with the working conditions thus preventing slam or jar.

These valves can be installed in either an horizontal or vertical pipe line. They are regularly furnished with end flanges faced but not drilled.

Sizes .....	2½	3	3½	4	5	6	8
Fig. 156 .....	37.00	44.00	51.00	58.00	79.00	102.00	162.00
Sizes .....	10	12	14	16	18	20	24
Fig. 156 .....	232.00	325.00	580.00	705.00	865.00	1025.00	*

\*Price On Application.

### Dimensions, Inches

Sizes .....	2½	3	3½	4	5	6	8
Face to face .....	11	12	13	14	17	19½	23½
Width of cover flange .....	6⅛	7	7⅜	8¼	9⅝	11⅜	14⅛
Diameter of end flanges .....	7	7½	8½	9	10	11	13½
Thickness of end flanges .....	11/16	¾	13/16	15/16	15/16	1	1⅛
Centre of valve to centre of lever .....	5⅛	5⅝	5⅞	6½	7¾	8¾	10¾
Centre of lever to outside of weight .....	1⅝	1⅝	1⅝	2⅛	2⅜	2⅞	2⅞
Centre to back of cover .....	4¼	4½	5	5½	6	7⅜	9⅛
Length of cover flange .....	8¼	9⅛	9⅞	10¾	12⅞	14¾	17¾
Centre of valve to end of lever .....	8⅜	8⅞	9⅝	10	11⅜	11⅞	14⅜
Sizes .....	10	12	14	16	18	20	24
Face to face .....	25¾	28½	33	38½	40	42	49
Width of cover flange .....	16	18½	21¾	24¾	27	28¾	32
Diameter of end flanges .....	16	19	21	23½	25	27½	32
Thickness of end flanges .....	1⅜	1¼	1⅜	1⅞	1⅞	1⅞	1⅞
Centre of valve to centre of lever .....	12	13⅝	15⅞	17⅞	18¼	19⅞	21¾
Centre of lever to outside of weight .....	3⅜	3⅝	3¾	3½	3⅜	4	3¼
Centre to back of cover .....	10⅞	11⅞	14¾	16¾	16⅞	17⅞	20¼
Length of cover flanges .....	20⅞	22⅞	28¼	31¾	33	34¾	39½
Centre of valve to end of lever .....	15⅝	20⅞	14¾	17⅞	22⅞	21⅞	41



# JENKINS IRON BODY VALVES

## MUD OR PLUG VALVES

### Bronze Mounted

Jenkins Mud or Plug Valves are for use in Sewage Disposal Plants, in the settling chambers of filtration plants, etc. The seat ring, spindle and disc are bronze. Any type of operating mechanism can be furnished including hydraulic when desired.

The illustration below shows the Jenkins Mud Valve with non-rising spindle which will be supplied unless instructed otherwise. When required to operate by Floorstand, the distance from face of flange to hand wheel and height of floor where floorstand is located should always be given.

Valves can be furnished with flange or spigot ends.



**Fig. 431**  
Flange Connection  
Code: ABVMA

**Fig. 432**  
Spigot end Connection  
Code: ABVMC

**Prices  
on Application**



View showing Mud Valve  
with Flange Connection  
and Hydraulic Operating  
Mechanism.



## IRON BODY GATE VALVES

	Pages
Low Pressure	156-157
Standard Pressure	158-171, 182-185
Medium Pressure	172-175
Extra Heavy Pressure	176-181, 186-188



IRON BODY GATE

*with*

Double Disc, Taper Seats.

Double Disc, Parallel Seats,

*and with*

Solid Wedge Disc

Pages 156 to 188 inclusive



## GATE PATTERNS

Valves Listed on Pages 156 to 188

**Disc Mechanism:** There are three distinct types of disc mechanisms.

1. Double Disc, tapered seat.
2. Double Disc, parallel seat.
3. Solid Wedge Type.

The seating used in the different types of valves is mentioned on the page illustrating the valve.

**Double Disc, Tapered Seat:** The discs are carried on a spindle nut forming a ball and socket combination, and allowing a certain amount of flexibility, permitting the discs to seat perfectly. Guides cast in the body prevent the discs from contacting the seat faces until fully closed. The valves may be installed in any position without fear of jamming. In opening, the first movement of the wheel loosens the discs, and the guides remove them from the seat faces.

**Double Discs, Parallel Seat:** On small sizes up to 8" inclusive, the wedging mechanism consists of a single wedge which is actuated from a stop cast in the valve body. In closing, the wedge contacting with the stop forces the discs against the seats. At the instant of closing, the discs are exactly opposite their ports and come up laterally without friction. In opening, sticking is overcome by making the spindle nut of different thicknesses on opposite sides. The first movement of the spindle releases the discs. On larger sizes the wedging mechanism consists of two wedges and two wedge carriers. In closing, the carriers, contacting the stops cast in the valve body, act upon the wedges forcing the discs when exactly opposite their ports against the seat faces. Like the smaller sizes the first movement of the spindle releases the discs. Both in opening and closing there is no friction between the discs and seat faces. Easy to operate no matter which side is toward the pressure. Valves of the parallel seat design will operate perfectly when installed horizontally, upright or at an angle except on large sizes for horizontal operation, when the discs are fitted with rollers travelling on tracks to reduce friction. Scrapers are employed to keep the tracks free of foreign matter.

**Body:** Globular in shape with an entire elimination of straight lines and sharp corners. Uniform distribution of metal, amply thick to withstand stresses far above those of actual service. Cast bronze seat rings are screwed into the body on sizes up to 12"; above this size the rings are provided with continuous dovetails and are rolled into the body under hydraulic pressure. The shoulder bears against the body, permanently assuring against leakage behind the ring.

**Spindle:** All Non-Rising Spindle Valves have manganese bronze spindles with a tensile strength of 50,000 to 60,000 pounds per square inch. Outside screw and yoke spindles are of rolled rod bronze, possessing an average tensile strength of 60,000 pounds per square inch. Operating threads are ACME STANDARD of correct pitch and lead to assure operation at a reasonable speed without too much effort.

**Bonnet:** Non-Rising Spindle Valves are of cast iron and provided with a flange slotted for the gland bolts. The stuffing box, bolted to the bonnet, is very liberal in depth and cubics, having more than ample space for packing material. In the Outside Screw Patterns, the bonnet is cast integral with the yoke in sizes up to 4". On larger sizes, a flange is provided on the bonnet for attachment of yoke. In all cases, the yoke is liberal in height (not restricted) so as to permit free access to the stuffing box and also keep the lowest threads on the spindle above the packing material in the stuffing box, preventing the cutting and tearing of the packing every time the valve is operated.

**Flanges:** Unless specifically mentioned, flanges faced only (not drilled) to the dimensions of American Standard will be supplied. Flanges of special dimensions or to British Tables supplied when required.

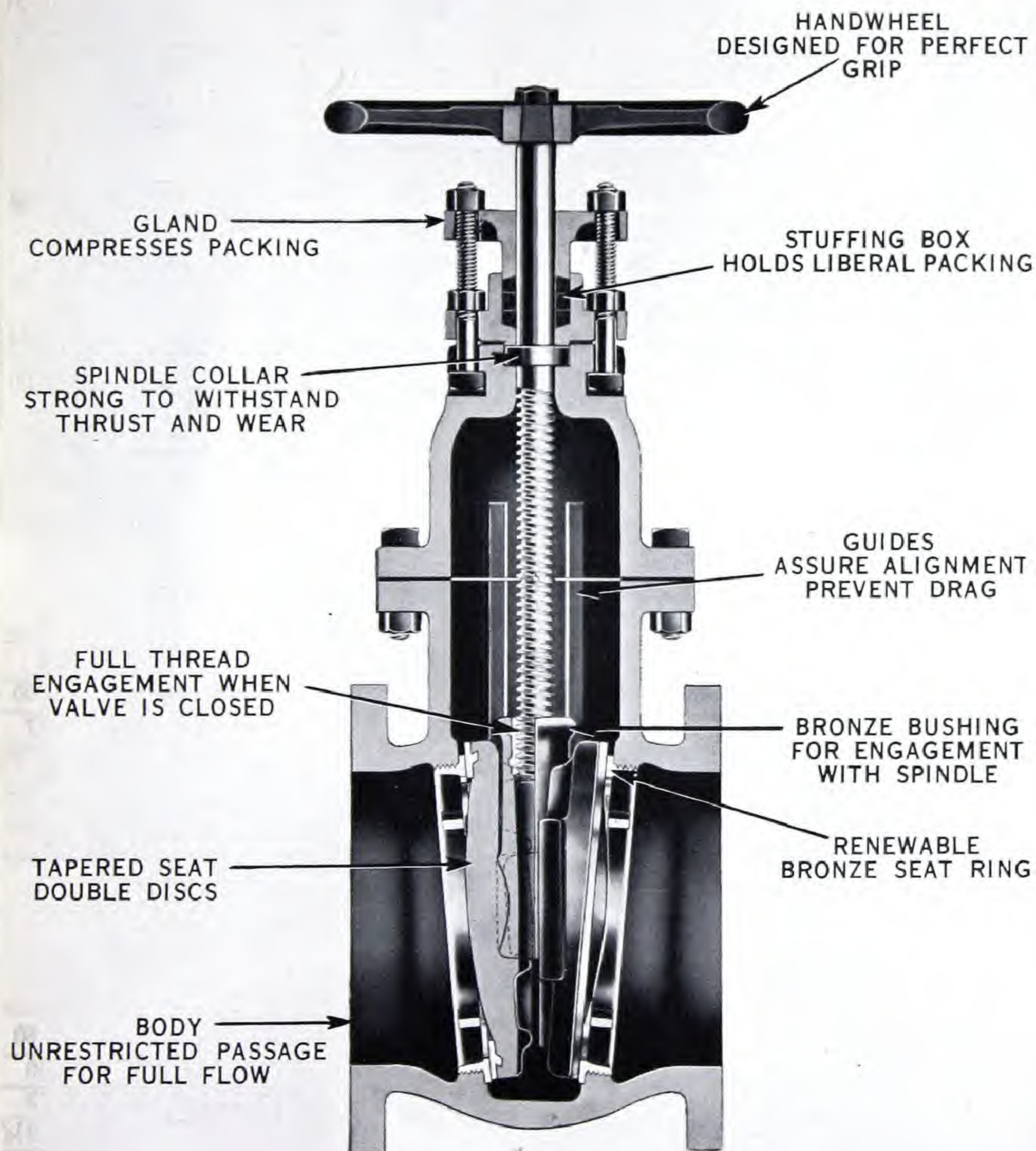
**Threaded Valves:** American standard threads to Briggs Standard gauges usually supplied. English threads to Whitworth gauges or special threads when required.

**Jenkins Iron Body Gate Valves** can be repacked under pressure when in the fully open position.



## FIG. 402

### STANDARD IRON BODY GATE VALVE



ADDITIONAL INFORMATION LISTED ON FOLLOWING PAGES.



# JENKINS IRON BODY VALVES

## GATE

### Low Pressure Pattern

Double Disc

Parallel Seat

Bronze Mounted

For Oil, Water and Gas

Tested to 50 Pounds Hydraulic Pressure



Fig. 410  
Gate, Flanged  
Code: ABVKC

### Non-Rising Spindle

These valves are of the double disc, parallel seat type. The working arrangement is explained on page 154. Flanges are made in accordance with American Standard dimensions. British table flanges can also be supplied if required. Unless otherwise specified, flanges are faced but not drilled.

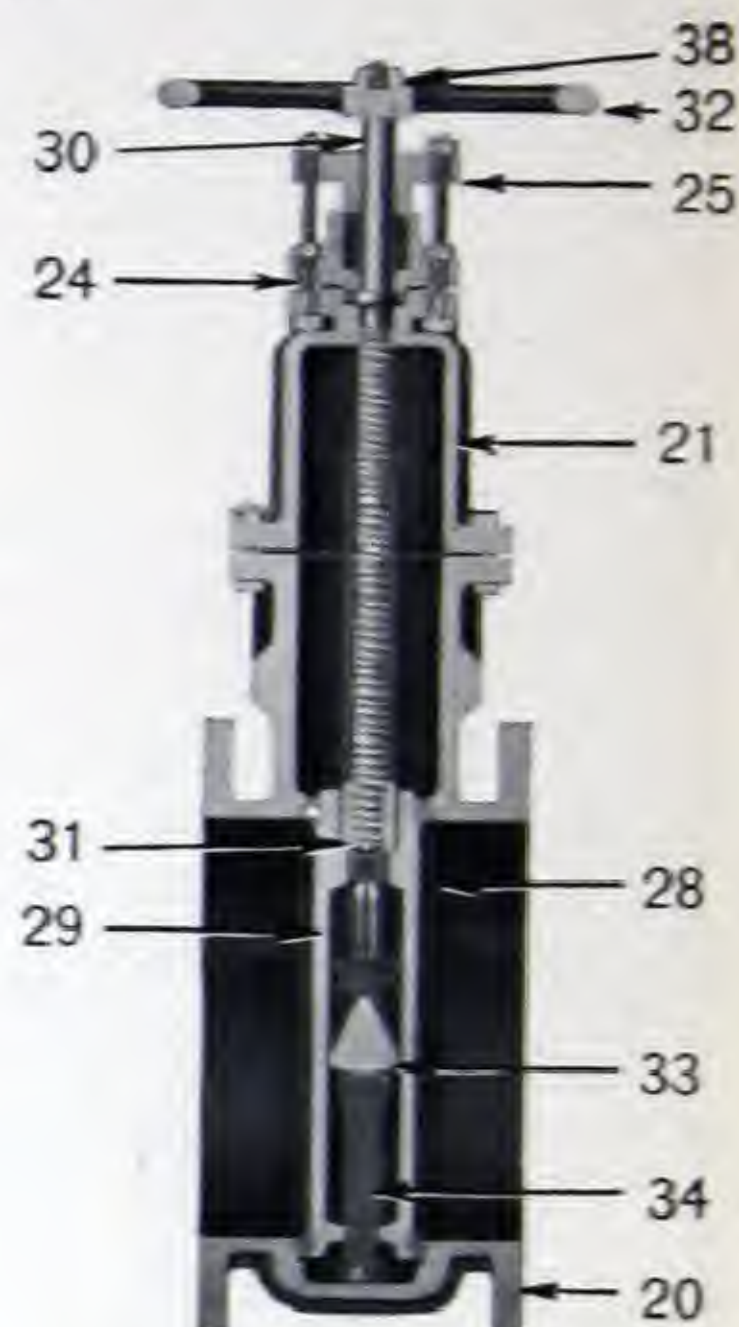


Fig. 410  
Sectional View

### Description of Parts

21. Bonnet	28. Seat ring (pair)	31. Spindle nut	34. Carriers (pair)
24. Stuffing box	29. Discs (pair)	32. Hand wheel	38. Wheel nut
25. Gland	30. Spindle	33. Wedges (pair)	

Sizes.....	10	12	14	16	18	20	24
Fig. 410.....	82.00	120.00	165.00	215.00	300.00	345.00	540.00
Wgt., lbs.....	285	412	511	662	803	1002	1337

Sizes.....	30	36	42	48	54	60
Fig. 410.....	1025.00	1450.00	*	*	*	*
Wgt., lbs.....	2205	4500				

Smaller sizes can be supplied.

Prices on Application

### Dimensions, Inches

Sizes.....	10	12	14	16	18	20	24	30	36	42	48	54	60
Face to face, flanged.....	9 <sup>3</sup> / <sub>4</sub>	11	11 <sup>1</sup> / <sub>2</sub>	12	12 <sup>1</sup> / <sub>2</sub>	13	13 <sup>1</sup> / <sub>4</sub>	15	19	22	22	30	36
Diameter of flanges.....	16	19	21	23 <sup>1</sup> / <sub>2</sub>	25	27 <sup>1</sup> / <sub>2</sub>	32	38 <sup>3</sup> / <sub>4</sub>	46	53	59 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>4</sub>	73
Thickness of flanges.....	1 <sup>5</sup> / <sub>16</sub>	1	1 <sup>1</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>4</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>	2	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>
Centre to top of wheel.....	25 <sup>5</sup> / <sub>8</sub>	29	32 <sup>7</sup> / <sub>16</sub>	36 <sup>1</sup> / <sub>8</sub>	39 <sup>1</sup> / <sub>4</sub>	43 <sup>1</sup> / <sub>2</sub>	49 <sup>11</sup> / <sub>16</sub>	60 <sup>5</sup> / <sub>8</sub>	73 <sup>1</sup> / <sub>4</sub>	*	*	*	*
Diameter of hand wheel.....	12	14	14	16	18	20	22	26	32	*	*	*	*

Prices of parts on application.

\*Large sizes are usually operated by gears, electric motor, or hydraulic pressure.

See pages 198 to 201. Prices on application.

When required, All Iron Valves can be supplied.



JENKINS IRON BODY VALVES

GATE
Low Pressure Pattern

Double Disc Parallel Seat Bronze Mounted

For Oil, Water and Gas
Tested to 50 Pounds Hydraulic Pressure

Outside Screw and Yoke



Fig. 412
Gate, Flanged
Code: ABVKG

These valves are of the double disc, parallel seat type. The working arrangement is explained on page 154. Flanges are made in accordance with American Standard Dimensions and unless otherwise specified are furnished faced but not drilled. British table flanges can also be supplied if required.

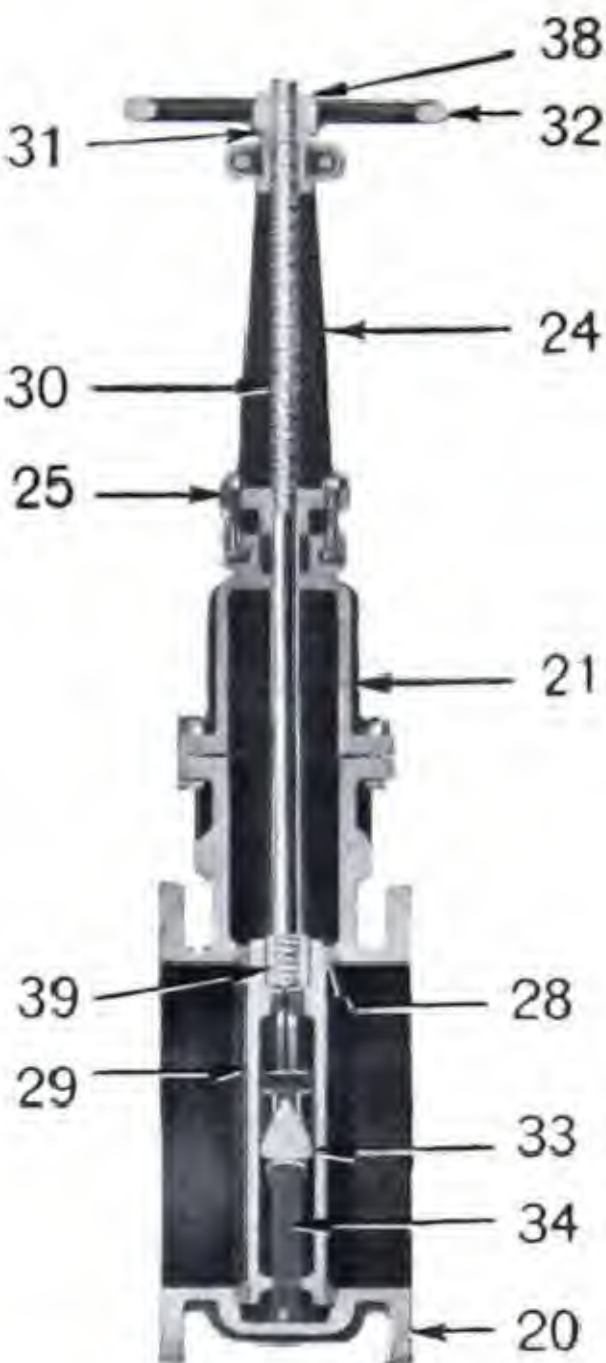


Fig. 412
Sectional View

- 21. Bonnet 28. Seat rings 32. Hand wheel 38. Jam nut
24. Yoke 29. Discs (pair) 33. Wedges (pair) 39. Spindle nut
25. Gland 30. Spindle 34. Carriers (pair)

Description of Parts

Table with 2 main sections. Section 1: Sizes 10, 12, 14, 16, 18, 20, 24. Section 2: Sizes 30, 36, 42, 48, 54, 60. Columns include Fig. 412 price and Wgt., lbs.

Smaller sizes can be supplied. Prices on application.

Dimensions, Inches

Table with 13 columns for sizes (10, 12, 14, 16, 18, 20, 24, 30, 36, 42, 48, 54, 60) and 7 rows for dimensions: Face to face, flanged; Diameter of flanges; Thickness of flanges; Centre to top of wheel; Centre to top of spindle, open; Diameter of hand wheel.

Prices of parts on application.

\*Large sizes are usually operated by gears, electric motor, or hydraulic pressure. See pages 198 to 201. Prices on application.
When required, All Iron Valves can be supplied.



# JENKINS IRON BODY VALVES

## GATE

### Standard Pattern

2"-24" Tapered Seat, Double Discs Non-Rising Spindle Bronze Mounted  
30"-60" Paralled Seat, Double Discs

Sizes 2" to 12" for 175 Pounds Oil, Water, Gas Working Pressure  
or for 125 Pounds Steam Working Pressure

Sizes 14" to 16" for 150 Pounds Oil, Water, Gas Working Pressure  
or for 125 Pounds Steam Working Pressure

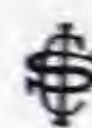
Sizes 18" and larger for 125 Pounds Oil, Water, Gas Working Pressure  
or for 100 Pounds Steam Working Pressure



Fig. 401  
Gate, Screwed  
Code: ABVJL



Conforming to Canadian Interprovincial Specifications  
Registration Number 0208-123456



Standard Pattern Gate Valves have double discs. Up to 24" the discs are of the tapered seat design as described on page 154. Sizes 30" and above, parallel seat type discs are used, these also are described on page 154. While the general practice is to supply flanged valves to American Standard dimensions, flanges to British Tables or special dimensions can also be supplied.



Fig. 402  
Gate, Flanged  
Code: ABVJM

Sizes	2	2½	3	3½	4	5	6	8	10	12
Fig. 401	10.00	11.50	14.00	17.00	19.00	27.50	32.50	54.00	90.00	125.00
Wgt., lbs.	25	33	48	53	77	102	151	235	380	560
Fig. 402	12.00	13.50	16.50	19.50	23.00	31.50	36.50	58.00	95.00	133.00
Wgt., lbs.	32	42	57	65	90	117	165	258	412	617

Sizes	14	16	18	20	24	30	36	42	48	54	60
Fig. 401											
Wgt., lbs.											
Fig. 402	181.00	260.00	350.00	425.00	600.00	*	*	*	*	*	*
Wgt., lbs.	855	1127	1631	2041	3130	*	*	*	*	*	*

### Dimensions, Inches

Sizes	2	2½	3	3½	4	5	6	8	10	12
Face to face, screwed	4¾	5½	6	6⅝	7⅛	8⅛	9	10	11½	12½
Face to face, flanged	5½	6	6¼	7	7½	8⅝	9½	10½	12	13¼
Diameter of flanges	6	7	7½	8½	9	10	11	13½	16	19
Thickness of flanges	⅝	11/16	¾	1⅜	1⅝	1⅝	1	1⅛	1⅜	1¼
Centre to top of wheel	10⅞	11⅞	12⅝	13¼	15⅜	18	20⅜	24	28⅜	31¼
Diameter of hand wheel	7	7	8	8	9	10	12	14	16	18

Sizes	14	16	18	20	24	30	36	42	48	54	60
Face to face, screwed											
Face to face, flanged	14½	15¾	18¼	19	21¾	26	30	34	40		
Diameter of flanges	21	23½	25	27½	32	38¾	46	53	59½	66¼	73
Thickness of flanges	1⅜	1⅜	1⅜	1⅜	1⅜	2⅜	2⅜	2⅜	2⅜	3	3⅜
Centre to top of wheel	36⅞	41¼	46	51⅞	59⅝	77¾	93				
Diameter of hand wheel	20	22	24	26	32	36	42	*	*	*	*

\*Large sizes are usually operated by gears, electric motor or hydraulic pressure. See pages 198 to 201. Prices on application.



# JENKINS IRON BODY VALVES

## GATE Standard Pattern

2''-24'' Tapered Seat, Double Discs Non-Rising Spindle Bronze Mounted  
30''-60'' Paralled Seat, Double Discs

Sizes 2'' to 12'' for 175 Pounds Oil, Water, Gas Working Pressure  
or 125 Pounds Steam Working Pressure

Sizes 14'' and 16'' for 150 Pounds Oil, Water, Gas Working Pressure  
or 125 Pounds Steam Working Pressure

Sizes 18'' and larger for 125 Pounds Oil, Water, Gas Working Pressure  
or 100 Pounds Steam Working Pressure

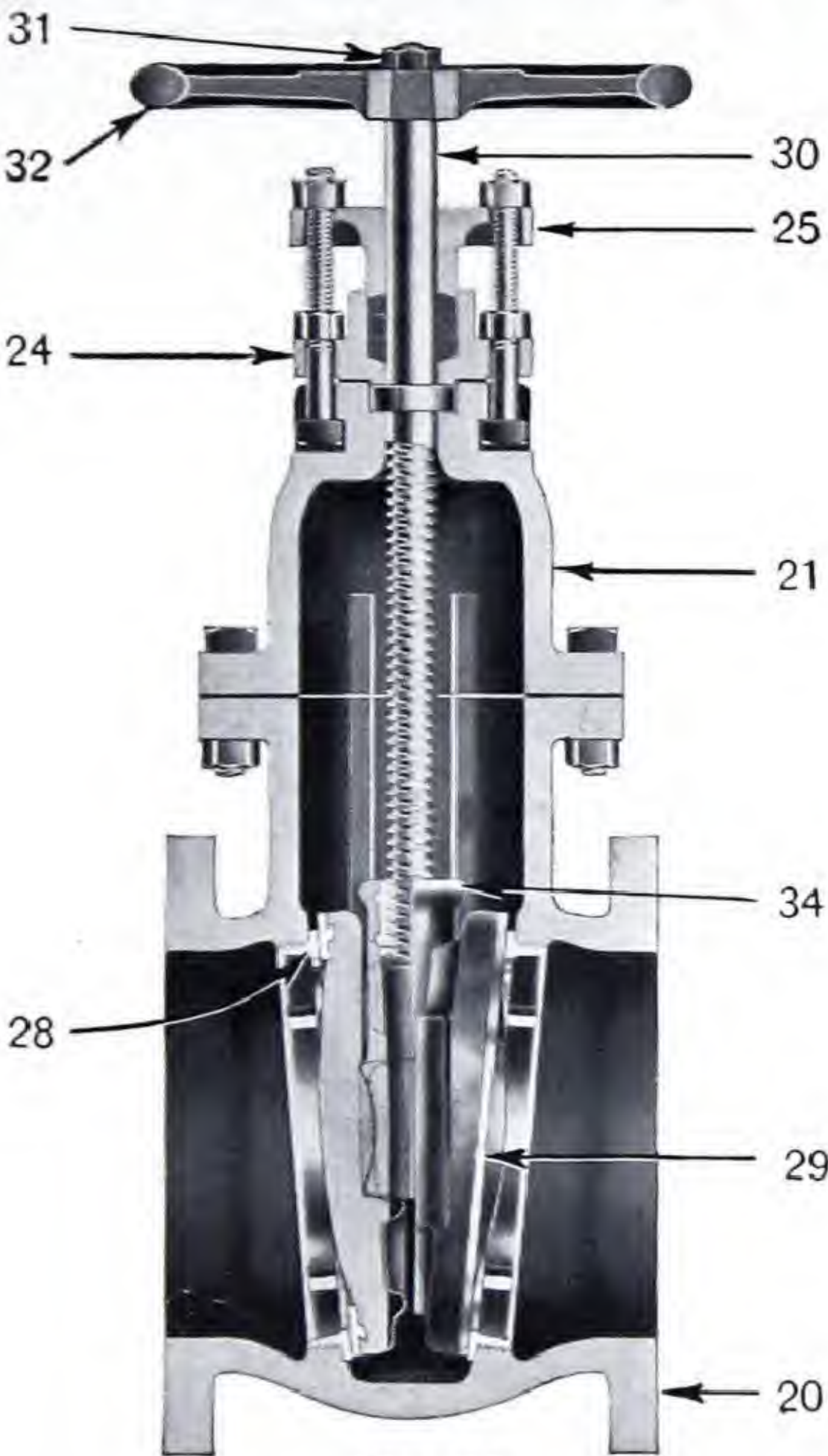


Fig. 402  
Sectional View of Taper Seat  
Design.

### List Price of Parts

Part No.....	Sizes	2	2½	3	3½	4	5	6	8	10	12	14
21 Bonnet.....		1.90	1.90	2.30	2.85	3.25	3.95	6.90	11.50	18.65	27.85	38.65
24. Stuffing box.....		.55	.70	.80	.80	.95	1.20	1.20	1.65	2.30	2.30	5.40
25. Gland.....		.55	.55	.55	.55	.70	.80	.80	1.20	1.35	1.35	3.00
28. Seat rings (pair)...		2.55	2.85	3.65	4.05	4.60	5.40	6.25	10.40	15.60	19.30	23.00
29. Discs (pair).....		2.85	3.25	3.25	3.50	4.60	5.95	8.80	14.05	23.25	34.75	63.55
30. Spindle.....		2.55	3.10	3.65	4.20	5.15	7.70	10.55	15.00	20.95	24.35	40.00
31. Wheel nut.....		.10	.10	.10	.10	.10	.15	.15	.15	.15	.20	.25
32. Wheel.....		.95	.95	.95	1.20	1.35	2.05	2.55	3.95	5.15	6.35	10.70
34. Spindle nut.....		.45	.50	.55	.60	.90	1.50	1.55	1.75	2.95	3.20	7.50

Parallel seating arrangement is described on page 154.  
The 2'' discs are made of bronze, above this size they are cast iron, with bronze faces rolled in.  
Prices of parts for valves 16'' and larger on application.



# JENKINS IRON BODY VALVES

## GATE Standard Pattern

2''-24'' Tapered Seat,  
Double Discs

Outside Screw and Yoke

Bronze Mounted

30''-60'' Paralled Seat, Double Discs



Fig. 403  
Gate, Screwed  
Code: ABVJO

Sizes 2'' to 12'' for 175 Pounds Oil, Water, Gas Working Pressure or for 125 pounds Steam Working Pressure.  
Sizes 14'' and 16'' for 150 Pounds Oil, Water, Gas Working Pressure or for 125 Pounds Steam Working Pressure.  
Sizes 18'' and larger for 125 Pounds Oil, Water, Gas Working Pressure or for 100 Pounds Steam Working Pressure.

Conforming to Canadian Interprovincial Specifications  
Registration Number 0209-123456

The seating arrangement of taper seat and parallel seat valves is described on page 154. Flanges to American Standard Dimensions regularly supplied. Flanges to British tables or special dimensions if desired.



Fig. 404  
Gate, Flanged  
Code: ABVJR

Sizes	2	2½	3	3½	4	5	6	8	10	12	14
Fig. 403	19.00	20.50	23.50	27.00	32.50	45.00	52.00	86.00	131.00	172.00	
Wgt., lbs.	32	38	51	56	82	116	165	264	440	600	
Fig. 404	21.00	22.50	26.00	29.50	36.50	49.00	56.00	90.00	136.00	180.00	255.00
Wgt., lbs.	39	47	60	68	95	131	177	286	470	657	943
Sizes	15	16	18	20	24	30	36	42	48	54	60
Fig. 403											
Wgt., lbs.											
Fig. 404	310.00	350.00	470.00	565.00	775.00	1400.00	*	*	*	*	*
Wgt., lbs.	1057	1223	1714	2168	3526	4800					

### Dimensions, Inches

Sizes	2	2½	3	3½	4	5	6	8	10	12	14
Face to face, screwed	4¾	5½	6	6⅝	7⅞	8⅞	9	10	11½	12½	
Face to face, flanged	5½	6	6¼	7	7½	8⅝	9½	10½	12	13¼	14½
Diameter of flanges	6	7	7½	8½	9	10	11	13½	16	19	21
Thickness of flanges	⅝	1⅞	¾	1⅞	1⅞	1⅞	1	1⅞	1⅞	1¼	1⅞
Centre to top of wheel	10⅞	11	12⅞	13⅞	16	19	21⅞	27⅞	32⅞	38	44⅞
Centre to top of spindle, open	13⅞	14⅞	16¾	18⅞	21¼	25⅞	29¼	37¼	44⅞	51⅞	60½
Diameter of hand wheel	7	7	8	8	9	10	12	14	16	18	20
Sizes	15	16	18	20	24	30	36	42	48	54	60
Face to face, screwed											
Face to face, flanged	15	15¾	18¼	19	21¾	26	30	34	40		
Diameter of flanges	22¼	23½	25	27½	32	38¾	46	53	59½	66¼	73
Thickness of flanges	1⅞	1⅞	1⅞	1⅞	1⅞	2⅞	2⅞	2⅞	2¾	3	3⅞
Centre to top of wheel	48⅞	50⅞	56¾	65⅞	75⅞	94⅞	115	*	*	*	*
Centre to top of spindle, open	65⅞	68⅞	77½	88	101⅞	128¼	154⅞	*	*	*	*
Diameter of hand wheel	20	22	24	26	32	36	42	*	*	*	*

\*Large sizes are usually operated by gears, electric motor or hydraulic pressure, see pages 198 to 201. Prices on application.



.....

## Standard Pattern

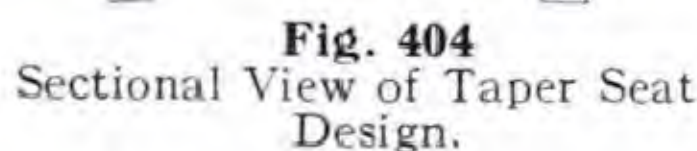
Double Disc

### Bronze Mounted

Sizes 2" to 12" for 175 Pounds Oil, Water, Gas Working Pressure  
or for 125 Pounds Steam Working Pressure

Sizes 14" and 16" for 150 Pounds Oil, Water, Gas Working Pressure  
or for 125 Pounds Steam Working Pressure

Sizes 18" and larger for 125 Pounds Oil, Water, Gas Working Pressure  
or for 100 Pounds Steam Working Pressure



**Fig. 404**  
Sectional View of Taper Seat  
Design.

### List Price of Parts

In sizes 2" to 4" inclusive, parts 21 and 24 are cast in one piece.

In sizes 2" to 3 1/2" inclusive, parts 21 and 24 are cast in one piece. The 2" discs are made of bronze, above this size they are cast iron with bronze faces rolled in. Prices of parts for valves 14" and larger on application.



# JENKINS IRON BODY VALVES

## GATE

With Hub Ends and Square Operating Nut

Non-Rising Spindle

Bronze Mounted

Sizes 2" to 14"  
300 Pounds Hydrostatic  
Test Pressure  
150 Pounds Water Working  
Pressure

Sizes 16" to 24"  
250 Pounds Hydrostatic  
Test Pressure  
125 Pounds Water Working  
Pressure

Sizes 30" to 48"  
200 Pounds Hydrostatic  
Test Pressure  
100 Pounds Water Working  
Pressure



Fig. 400  
Gate, with Hub Ends  
Code: ABVJI

Hub End Valves can be supplied to open by turning to left or right. It is customary to furnish open left unless otherwise ordered. The hubs are made to suit either Cast Iron, Steel or Wood Pipe, and Valves for Cast Iron Pipe will be shipped unless otherwise specified. It is regular practice to furnish valves with 2" square operating nuts, but when desired, iron hand wheels can be fitted without extra charge. Sizes 2" to 24" are of the taper seat, double disc design, 30" and larger have parallel seat, double disc, and are both described on page 154.

Sizes.....	2	3	4	5	6	8	10
Fig. 400.....	10.00	14.00	19.00	27.50	32.50	54.00	90.00
Wgt., lbs.....	34	61	100	126	177	257	421

Sizes.....	12	14	16	18	20	24	30
Fig. 400.....	125.00	173.00	250.00	340.00	415.00	590.00	1075.00
Wgt., lbs.....	581	821	1083	1609	1938	3078	4100

For list price of parts, see page 159.

### Dimensions, Inches

Sizes.....	2	3	4	5	6	8	10
End to end.....	8 <sup>3</sup> / <sub>4</sub>	9 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	12 <sup>3</sup> / <sub>8</sub>	13 <sup>1</sup> / <sub>2</sub>	14	15 <sup>1</sup> / <sub>2</sub>
Diameter inside of hub.....	3 <sup>1</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	5 <sup>11</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>4</sub>	7 <sup>29</sup> / <sub>64</sub>	10 <sup>7</sup> / <sub>64</sub>	12 <sup>3</sup> / <sub>16</sub>
Depth of recess.....	2 <sup>3</sup> / <sub>4</sub>	3	3 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	4	4
Thickness of hub.....	1 <sup>1</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>11</sup> / <sub>32</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>29</sup> / <sub>64</sub>	1 <sup>9</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>
Diameter outside of hub end.....	5 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> / <sub>8</sub>	8 <sup>3</sup> / <sub>8</sub>	9 <sup>3</sup> / <sub>8</sub>	10 <sup>13</sup> / <sub>16</sub>	13 <sup>1</sup> / <sub>4</sub>	15 <sup>1</sup> / <sub>16</sub>
Face of square spindle nut.....	2	2	2	2	2	2	2
Centre of body to top of nut.....	11 <sup>7</sup> / <sub>8</sub>	13 <sup>7</sup> / <sub>8</sub>	16 <sup>1</sup> / <sub>2</sub>	19	21 <sup>1</sup> / <sub>4</sub>	25	29

Sizes.....	12	14	16	18	20	24	30
End to end.....	16 <sup>1</sup> / <sub>4</sub>	17	17 <sup>1</sup> / <sub>2</sub>	19	19	21 <sup>3</sup> / <sub>4</sub>	27
Diameter inside of hub.....	14 <sup>5</sup> / <sub>16</sub>	16 <sup>15</sup> / <sub>32</sub>	18 <sup>13</sup> / <sub>16</sub>	20 <sup>15</sup> / <sub>16</sub>	23 <sup>1</sup> / <sub>16</sub>	27 <sup>5</sup> / <sub>16</sub>	33 <sup>3</sup> / <sub>4</sub>
Depth of recess.....	4	4	4	4	4	4	4 <sup>3</sup> / <sub>4</sub>
Thickness of hub.....	1 <sup>23</sup> / <sub>32</sub>	1 <sup>27</sup> / <sub>32</sub>	1 <sup>29</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>8</sub>	2 <sup>9</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>2</sub>	3
Diameter outside of hub end.....	17 <sup>3</sup> / <sub>4</sub>	20 <sup>5</sup> / <sub>32</sub>	22 <sup>5</sup> / <sub>8</sub>	25 <sup>3</sup> / <sub>16</sub>	27 <sup>5</sup> / <sub>8</sub>	32 <sup>5</sup> / <sub>16</sub>	39 <sup>3</sup> / <sub>4</sub>
Face of square spindle nut.....	2	2	2	2	2	2	2
Centre of body to top of nut.....	32 <sup>1</sup> / <sub>8</sub>	37 <sup>5</sup> / <sub>16</sub>	41 <sup>5</sup> / <sub>8</sub>	46 <sup>1</sup> / <sub>4</sub>	54 <sup>9</sup> / <sub>16</sub>	62 <sup>3</sup> / <sub>16</sub>	77 <sup>3</sup> / <sub>4</sub>

Larger sizes can also be made to operate by gears or electric motor. Prices on application.



JENKINS IRON BODY VALVES

GATE

With Hub Ends, Square Operating Nut and  
Extension Spindle Coupling

Tapered Seat  
Double Discs

Non-Rising Spindle

Bronze Mounted

Underwriters' Pattern

Sizes 4" to 14"

300 Pounds Hydrostatic Test Pressure

150 Pounds Water Working Pressure



Fig. 822  
Gate, with Hub Ends  
Code: ABWZH

These valves conform to the specifications and are approved by the National Board of Fire Underwriters and the Associated Factory Mutual Fire Insurance Companies. They are marked F.M. and JBU. For accommodating the indicator post generally used with this type of valve, a bonnet flange is provided to which the indicator post flange is bolted.

Valves can also be supplied with flanged ends if desired.

Sizes.....	4	5	6	8	10	12	14
Fig. 822.....	19.00	27.50	32.50	54.00	90.00	125.00	173.00
Wgt., lbs.....	125	151	202	282	446	606	846

Dimensions, Inches

Sizes.....	4	5	6	8	10	12	14
End to end.....	11¼	12¾	13½	14	15½	16¼	17
Diameter inside of hub.....	5⅛	6¾	7 <sup>29</sup> / <sub>32</sub>	10 <sup>7</sup> / <sub>64</sub>	12 <sup>3</sup> / <sub>16</sub>	14 <sup>5</sup> / <sub>16</sub>	16 <sup>15</sup> / <sub>32</sub>
Depth of recess.....	3½	3½	3¾	4	4	4	4
Thickness of hub.....	1 <sup>11</sup> / <sub>32</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>29</sup> / <sub>64</sub>	1 <sup>9</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	1 <sup>23</sup> / <sub>32</sub>	1 <sup>27</sup> / <sub>32</sub>
Diameter outside of hub end.....	8¾	9¾	10 <sup>13</sup> / <sub>16</sub>	13¼	15 <sup>7</sup> / <sub>16</sub>	17¾	20 <sup>5</sup> / <sub>32</sub>
Face of square spindle nut...	2	2	2	2	2	2	2
Centre of body to top of nut.....	16½	19	21¼	25	29	32 <sup>1</sup> / <sub>8</sub>	37 <sup>5</sup> / <sub>16</sub>



# JENKINS IRON BODY VALVES

## GATE

### Underwriters Pattern

Tapered Seat  
Double Discs

Outside Screw and Yoke

Bronze Mounted

For 150 Pounds Water Working Pressure



Fig. 824  
Gate, Screwed  
Code: ABWZL

Jenkins Underwriters' Pattern Gate Valves are approved by the National Board of Fire Underwriters and the Associated Factory Mutual Fire Insurance Companies. In compliance with the Underwriters' specifications, these valves have bronze-bushed stuffing box, bronze stuffing box nuts, bronze glands, bronze spindle and renewable bronze seat rings and bear the identification marks FM and JBU.

These valves are of the tapered seat, double disc type. Guides cast in body prevent chattering when the valve is partially open and keep disc faces from touching seats until at point of final closing. When fully open, the discs are entirely removed from line of flow.

Unless otherwise specified, flanged valves are furnished faced but not drilled.



Fig. 825  
Gate, Flanged  
Code: ABWZN

Sizes.....	2½	3	3½	4	5	6	8	10	12
Fig. 824.....	20.50	23.50	27.00	32.50	45.00	52.00	86.00	131.00	172.00
Wgt., lbs.....	38	51	56	82	116	165	264	440	600
Fig. 825.....	22.50	26.00	29.50	36.50	49.00	56.00	90.00	136.00	180.00
Wgt., lbs.....	47	60	68	95	131	177	286	470	657

### Dimensions, Inches

Sizes.....	2½	3	3½	4	5	6	8	10	12
Face to face, screwed.....	5½	6	6⅝	7⅛	8⅛	9	10	11½	12½
Face to face, flanged.....	6	6¼	7	7½	8⅝	9½	10½	12	13¼
Diameter of flanges.....	7	7½	8½	9	10	11	13½	16	19
Thickness of flanges.....	11/16	¾	13/16	15/16	15/16	1	1⅛	13/16	1¼
Centre of body to top of wheel.	11	12⅞	13⅞	16	19	21⅞	27⅞	32⅞	38
Centre of body to top of spindle, open.....	14⅝	16¾	18⅞	21¼	25⅛	29¼	37¼	44⅛	51⅝
Diameter of hand wheel.....	7	8	8	9	10	12	14	16	18



J E N K I N S   I R O N   B O D Y   V A L V E S

QUICK OPENING GATE  
With Sliding Spindle and Lever  
Standard Pattern

Tapered Seat  
Double Disc

Bronze Mounted

Made from 125 Pound Steam or 200 Pound Oil, Water, Gas Pattern  
*For control of fluids at moderately low pressures  
where quick operation is essential*



Fig. 407  
Gate, Screwed  
Code: ABVJW  
(Not illustrated)

These valves are of the double disc, tapered seat, and have renewable seat rings. Guides cast in the body prevent the discs from touching the seats until at final point of closing. When fully open the discs are entirely removed from the line of flow.

Flanges are in accordance with American Standard Dimensions, but if required, special dimensions or flanges in accordance with British tables can be supplied.

Fig. 408  
Gate, Flanged  
Code: ABVJV

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Fig. 407.....	17.50	19.00	22.00	25.00	30.00	42.00	48.00	80.00	122.00	160.00
Wgt., lbs.....	24	32	48	53	78	104	153	242	401	577
Fig. 408.....	19.50	21.00	24.50	27.50	34.00	46.00	52.00	84.00	127.00	168.00
Wgt., lbs.....	31	41	57	65	91	119	167	265	433	634

Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Face to face, screwed.....	4¾	5½	6	6⅝	7⅛	8⅛	9	10	11½	12½
Face to face, flanged.....	5½	6	6¼	7	7½	8⅝	9½	10½	12	13¼
Diameter of flanges.....	6	7	7½	8½	9	10	11	13½	16	19
Thickness of flanges.....	⅝	11/16	¾	13/16	15/16	15/16	1	1⅛	1⅜	1¼
Centre of fulcrum to end of lever.	12⅜	12⅜	15	15	18½	21	26½	32¼	38¾	38¾
Centre of body to end of lever lock, open.....	17½	18¾	21½	22½	26½	30	35	42	54	58½
Centre of body to top of lever, open.....	16	18	22½	24	28½	31½	43	50	62	68

These valves can also be supplied in all iron, when required.



# JENKINS IRON BODY VALVES

## ANGLE GATE Standard Pattern

Tapered Seat  
Double Discs

Bronze Mounted

For 125 Pounds Steam Working Pressure  
or 175 Pounds Oil, Water, Gas Working Pressure

Non-Rising Spindle

Outside Screw and Yoke



Fig. 312  
Angle, Flanged  
Code: ABUYM

This type of valve is ideally suited for close quarters, it eliminates using a fitting and makes a more compact installation.

The double disc, tapered seat is employed in this design of valve. The discs are guided during travel and do not contact the seat rings until fully closed.



Fig. 313  
Angle, Flanged  
Code: ABUYO

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Fig. 312.....	Net prices on application.....									
Wgt., lbs.....	34	45	60	68	95	129	185	290	457	666
Fig. 313.....	Net prices on application.....									
Wgt., lbs.....	41	50	63	71	105	143	197	318	515	700

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Centre to face.....	2¾	3	3⅛	3½	3¾	4⅝	4¾	5¼	6	6⅝
Centre to face of angle.....	3¼	3⅝	4	4¾	5¼	6⅛	6¾	8½	10	11
Centre of valve to centre of angle..	2¾	3	3½	4	4½	5¼	6⅜	7½	8¾	10¼
Diameter of flanges.....	6	7	7½	8½	9	10	11	13½	16	19
Thickness of flanges.....	⅝	11/16	¾	13/16	15/16	15/16	1	1⅛	1⅜	1¼
Centre to top of hand wheel, Fig. 312.....	10⅞	11⅛	12⅝	13¼	15⅜	18	20⅜	24	28⅜	31¼
Centre to top of hand wheel, Fig. 313.....	10⅞	11	12⅞	13⅞	16	19	21⅞	27⅞	32⅞	38
Centre to top of spindle when open, Fig. 313.....	13⅞	14⅝	16¾	18⅞	21¼	25⅛	29¼	37¼	44⅛	51⅝
Diameter of hand wheel.....	7	7	8	8	9	10	12	14	16	18

These valves can be supplied with screwed ends, also in All Iron if desired.



JENKINS IRON BODY VALVES

GATE  
Non-Rising Spindle

Tapered Seat  
Double Discs

Indicator

Bronze Mounted

For 125 Pounds Steam Working Pressure  
or 200 Pounds Oil, Water, Gas Working Pressure



Fig. 405  
Gate, Screwed  
Code: ABVJS  
(Not illustrated)

Fig. 406  
Gate, Flanged  
Code: ABVJU

These valves have double discs, tapered seats. Guides in the body guide the discs during travel. The disc faces are unable to contact with the seat faces until fully closed, preventing scoring of the faces. Indicators mounted on the bonnet and operated by the spindle threads indicate the position of the discs at a glance.

Sizes . . . . .	2	2½	3	3½	4	5	6	8	10	12
Fig. 405 . . . . .	17.50	19.00	22.00	25.00	30.00	42.00	48.00	80.00	122.00	160.00
Wgt., lbs. . . . .	26	35	50	56	80	106	157	241	385	565
Fig. 406 . . . . .	19.50	21.00	24.50	27.50	34.00	46.00	52.00	84.00	127.00	168.00
Wgt., lbs. . . . .	33	43	59	68	93	121	171	263	418	622

Dimensions, Inches

Sizes . . . . .	2	2½	3	3½	4	5	6	8	10	12
Face to face, screwed . .	4¾	5½	6	6⅝	7⅛	8⅛	9	10	11½	12½
Face to face, flanged . .	5½	6	6¼	7	7½	8⅝	9½	10½	12	13¼
Diameter of flanges . . .	6	7	7½	8½	9	10	11	13½	16	19
Thickness of flanges . . .	⅝	1⅛	¾	1⅜	1⅝	1⅝	1	1⅛	1⅜	1¼
Centre to top of hand wheel . . . . .	12⅜	13⅛	15⅛	15⅞	18⅛	20⅞	23⅜	28	33⅛	36⅞
Diameter of hand wheel . . . . .	7	7	8	8	9	10	12	14	16	18



# JENKINS IRON BODY VALVES

## GATE Standard Pattern

Tapered Seat  
Double Discs

Compound Screw

Bronze Mounted

For 125 Pounds Steam Working Pressure  
or 175 Pounds Oil, Water, Gas Working Pressure



Fig. 480  
Sectional View

Fig. 480  
Gate, Flanged  
Code: ABVRW

These valves are suitable for use where it is desirable to have a quick opening Screw Stem Valve, or where a sliding Stem and Lever Valve cannot be used.

In opening the valve, the gates rise on the stem at the same time that the stem rises out of the valve, thus giving a compound movement.

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Fig. 480.....	Prices on application.....									
Wgt., lbs.....	40	49	62	70	100	140	182	295	485	670

Can also be supplied with screwed ends. Prices on application.

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Face to face, flanged..	5½	6	6¼	7	7½	8⅝	9½	10½	12	13¼
Diameter of flanges...	6	7	7½	8½	9	10	11	13½	16	19
Thickness of flanges...	⅝	11/16	¾	13/16	15/16	15/16	1	1⅛	1⅜	1½
Centre to top of hand wheel.....	9⅜	9¾	11⅜	12⅛	14	16½	18¾	23⅝	28	32
Centre to top of hand wheel, open.....	11⅜	12¼	14⅛	15⅝	18	21½	24¾	31⅝	38	44
Diameter of hand wheel.....	7	7	8	8	9	10	12	14	16	18



.....

GATE  
Standard Pattern

All Iron

### Sizes 14" and 16" for 150 Pounds Working Pressure

Recommended for Ammonia, Cyanide, Caustic Soda, Potash and Alkaline Fluids



**Fig. 421**  
Gate, Screwed  
Code: ABVLD

Flanges are in accordance with American Standard unless otherwise specified. Flanges to British tables or special dimensions can also be supplied.



**Fig. 422**  
Gate, Flanged  
Code: ABVLF

Sizes.....	<b>2</b>	<b>2½</b>	<b>3</b>	<b>3½</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>16</b>
Fig. 421.....	<b>10.00</b>	<b>11.50</b>	<b>14.00</b>	<b>17.00</b>	<b>19.00</b>	<b>27.50</b>	<b>32.50</b>	<b>54.00</b>	<b>90.00</b>	<b>125.00</b>	.....	.....
Wgt., lbs.....	25	33	48	53	77	102	151	235	380	560	.....	.....
Fig. 422.....	<b>12.00</b>	<b>13.50</b>	<b>16.50</b>	<b>19.50</b>	<b>23.00</b>	<b>31.50</b>	<b>36.50</b>	<b>58.00</b>	<b>95.00</b>	<b>133.00</b>	<b>181.00</b>	<b>260.00</b>
Wgt., lbs.....	32	42	57	65	90	117	165	258	412	617	855	1127

### Dimensions, Inches

Sizes . . . . .	2	2½	3	3½	4	5	6	8	10	12	14	16
Face to face, screwed.	4¾	5½	6	6⅝	7⅛	8⅛	9	10	11½	12½	.....	.....
Face to face, flanged.	5½	6	6¼	7	7½	8⅝	9½	10½	12	13¼	14½	15¾
Diameter of flanges . .	6	7	7½	8½	9	10	11	13½	16	19	21	23½
Thickness of flanges . .	⅝	11/16	¾	13/16	15/16	15/16	1	1⅛	1⅜	1¼	1⅜	17/16
Centre to top of wheel	107/16	111/8	125/8	13¼	153/16	18	203/16	24	283/16	31¼	3611/16	41¼
Diameter of hand wheel . . . . .	7	7	8	8	9	10	12	14	16	18	20	22

For list price of Parts, see page 159.



# JENKINS ALL IRON VALVES

## GATE Standard Pattern

Tapered Seat  
Double Discs

Outside Screw and Yoke

All Iron

Sizes 2" to 12" for 175 Pounds Working Pressure  
Sizes 14" and 16" for 150 Pounds Working Pressure

Recommended for Ammonia, Cyanide, Caustic Soda, Potash and Alkaline Fluids



Fig. 423  
Gate, Screwed  
Code: ABVLH

The double disc, tapered seat, is the seating mechanism employed in this type of valve. The discs are guided during travel and this does not permit the disc faces to contact with the seat faces until fully closed, preventing scoring.

The interior working parts are all iron.



Fig. 424  
Gate, Flanged  
Code: ABVLJ

Sizes.....	2	2½	3	3½	4	5	6	8	10	12	14	16
Fig. 423.....	17.50	19.00	22.00	25.00	30.00	42.00	48.00	80.00	122.00	160.00	.....	.....
Wgt., lbs.....	32	38	51	56	82	116	165	264	440	600	.....	.....
Fig. 424.....	19.50	21.00	24.50	27.50	34.00	46.00	52.00	84.00	127.00	168.00	236.00	325.00
Wgt., lbs.....	39	47	60	68	95	131	177	286	470	657	943	1223

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8	10	12	14	16
Face to face, screwed.....	4¾	5½	6	6⅝	7⅛	8⅛	9	10	11½	12½	.....	.....
Face to face, flanged.....	5½	6	6¼	7	7½	8⅝	9½	10½	12	13¼	14½	15¾
Diameter of flanges.....	6	7	7½	8½	9	10	11	13½	16	19	21	23½
Thickness of flanges.....	⅝	11/16	¾	13/16	15/16	15/16	1	1⅛	1⅜	1¼	1⅜	17/16
Centre to top of wheel.....	10⅜	11	12⅞	13⅞	16	19	21⅜	27⅞	32⅜	38	44⅜	50⅜
Centre to top of spindle, open..	13⅜	14⅝	16¾	18⅞	21¼	25⅛	29¼	37¼	44⅛	51⅝	60½	68⅞
Diameter of hand wheel....	7	7	8	8	9	10	12	14	16	18	20	22

For List Price of Parts, see page 161.



JENKINS IRON BODY VALVES

CLIP GATE

Rising Spindle

Bronze Mounted and All-Iron Patterns

Screwed: Sizes 1/2" to 2" for 150 Pounds Steam or 225 Pounds Oil, Water, Gas Working Pressure

Sizes 2 1/2" to 4" for 125 Pounds Steam or 175 Pounds Oil, Water, Gas Working Pressure

Flanged: For 125 Pounds Steam or 175 Pounds Oil, Water, Gas Working Pressure



Fig. 40  
Screwed, all iron  
Code: ABTIO  
(Not illustrated)



Fig. 41  
Flanged, all iron  
Code: ABTIP  
(Not illustrated)



Fig. 43  
Flanged,  
Bronze  
Mounted  
Code: ABTIS  
(Not  
illustrated)

Fig. 42  
Sectional View

Fig. 42  
Screwed, Bronze Mounted  
Code: ABTIR

Fig. 42  
Sectional View  
(Showing drainage channels)

The sectional views disclose the rugged construction. The design of the bonnet permits complete drainage of the chamber when the valve is open and the pipe line drained (a prevention against freezing when exposed to low temperatures). On all sizes a stuffing box gland presses the packing, making a tight spindle joint. A floating type spindle nut is used (and which is easily renewed).

Bronze Mounted Clip Gates are recommended for lines carrying steam, hot and cold water, oil, gas, and air. They are well suited to many uses in the petroleum and gas industries, sugar, chemical process and other plants. They are regularly fitted with bronze interior working parts, also seat rings, gland and packing nut.

All Iron Clip Gates are recommended for lines carrying Ammonia, Cyanide, Caustic Soda, Potash and Alkaline Fluids. The spindle, seat rings and gland are steel, the disc and floating type spindle nut, malleable iron.

Size.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
Fig. 40, All Iron, screwed.....	3.50	3.90	4.30	5.70	7.00	10.00	17.70	22.00	45.00	45.00
Fig. 41, All Iron, flanged.....	Prices on application.....									
Fig. 42, Bronze mounted, screwed.....	3.20	3.60	4.00	5.50	6.80	10.00	18.00	22.50	50.00	50.00
Fig. 43, Bronze mounted, flanged.....	Prices on application.....									

Dimensions, Inches

Size.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
Face to face, screwed..	2 1/16	2 5/16	2 9/16	2 7/8	3 1/8	3 5/8	4 1/8	4 9/16	5 1/16	5 9/16
Centre to top of wheel, closed.....	4 5/8	5 7/8	6 9/16	7 9/16	8 3/4	10 1/2	12 5/16	14 3/16	16 3/4	19 5/16
Centre to top of wheel, open.....	5 1/4	6 3/4	7 11/16	9	10 7/16	12 11/16	15	17 3/8	20 1/2	23 5/8
Diameter of hand wheel.....	2 1/16	2 1/16	2 13/16	3	3 7/16	4 1/8	4 3/8	5	5 15/16	6 1/2



# JENKINS IRON BODY VALVES

## GATE Medium Pattern

Solid Wedge Disc

Non-Rising Spindle

Bronze Mounted

For 175 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0210-123456

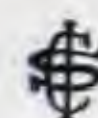


Fig. 251  
Gate, Screwed  
Code: ABUOT

These valves are of the double face, solid wedge type and have renewable bronze seat rings. Guides cast in the body prevent chattering when the valve is partially open and keep wedge from touching the seats until at the final point of closing. When fully open, the wedge is entirely removed from line of flow.

Valves are usually supplied with flanges in accordance with American Extra Heavy Standard dimensions with  $\frac{1}{16}$ " raised face; valves with flanges to British tables or special dimensions supplied when specified. Flanged valves are furnished faced only, unless instructed to drill.



Fig. 255  
Gate, Flanged  
Code: ABUPG

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Fig. 251.....	15.00	17.00	20.00	25.00	28.00	40.00	50.00	87.00	145.00	185.00
Wgt., lbs.....	28	38	55	70	88	135	181	309	470	646
Fig. 255.....	17.50	19.50	23.00	28.00	33.00	45.00	57.00	94.00	153.00	195.00
Wgt., lbs.....	37	55	78	98	123	182	231	393	576	776

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Face to face, screwed..	5½	5⅞	6¾	7	7½	8½	9	10¾	12¼	13½
Face to face, flanged..	8¼	8¾	9½	10	10½	11½	12	13½	15	16
Diameter of flanges...	6½	7½	8¼	9	10	11	12½	15	17½	20½
Thickness of flanges...	⅞	1	1⅞	1¾	1¼	1⅜	1⅞	1⅝	1⅞	2
Centre to top of wheel.	10⅞	11⅞	12⅝	13¾	15⅞	18⅜	20⅞	24⅜	28¾	32⅞
Diameter of hand wheel.....	7	7	8	8	10	12	12	14	16	18



JENKINS IRON BODY VALVES

GATE  
Medium Pattern

Solid Wedge Disc                      Non-Rising Spindle                      Bronze Mounted

For 175 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure

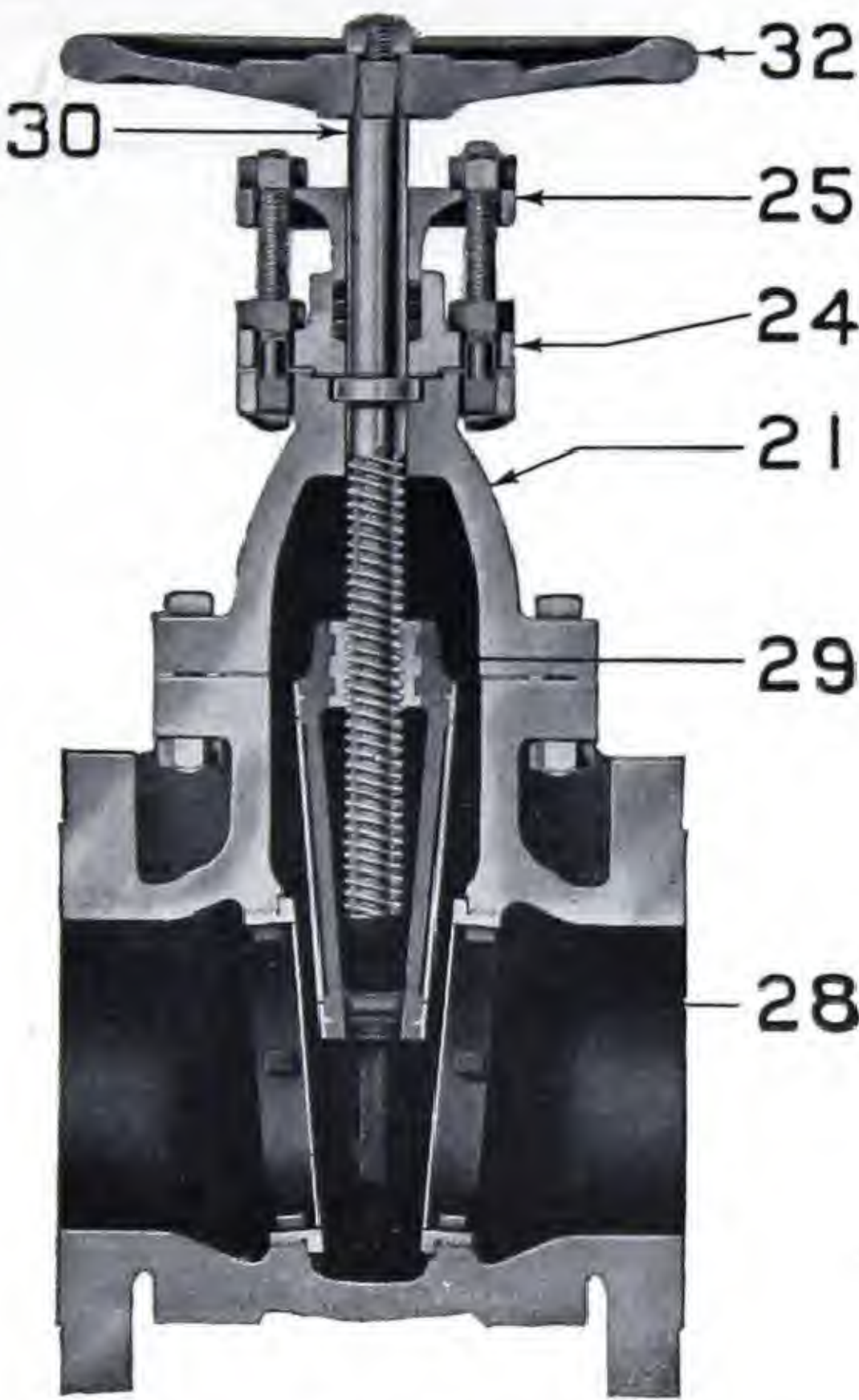


Fig. 255  
Sectional View

List Prices of Parts

Part No. . . . . Sizes	2	2½	3	3½	4	5	6	8	10	12
21. Bonnet . . . . .	2.75	2.75	3.15	4.00	4.65	5.65	10.15	17.75	28.65	39.40
24. Stuffing box . . . . .	.65	.90	1.00	1.00	1.40	1.65	1.65	2.50	3.65	3.65
25. Gland . . . . .	.65	.65	.90	.90	1.50	1.65	1.65	1.90	2.15	2.15
28. Seat rings (pair) . . . . .	2.50	2.75	3.50	4.25	4.75	5.65	7.00	15.25	21.15	35.50
29. Wedge . . . . .	4.00	4.65	4.65	5.00	6.50	8.15	12.75	21.25	35.75	49.25
30. Spindle . . . . .	2.90	3.50	4.65	5.40	6.25	8.40	10.90	17.35	25.75	31.50
32. Wheel . . . . .	1.40	1.40	1.40	1.65	2.00	2.90	3.90	6.25	7.90	8.50

The discs up to and including 3" are cast of solid bronze. 3½" to 12" are iron with bronze faces rolled in.



# JENKINS IRON BODY VALVES

## GATE Medium Pattern

Solid Wedge Disc

Outside Screw and Yoke

Bronze Mounted

For 175 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0210-123456

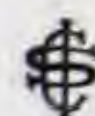


Fig. 277  
Gate, Screwed  
Code: ABUTH

These valves are of the double-face solid wedge type and have renewable bronze seat rings. Guides cast in the body prevent chattering when the valve is partially open and keep wedge from contacting the seat until at the final point of closing. When fully open, the wedge is entirely removed from the line of flow. The rising spindle of this type of valve serves as an indicator and the outside threads can be cleaned easily.

Valves are usually supplied with flanges in accordance with American Extra Heavy Standard dimensions with  $\frac{1}{16}$ " raised face; Valves with flanges to British Tables or special dimensions supplied when specified. Flanged valves are furnished faced only, unless instructed to drill.



Fig. 253  
Gate, Flanged  
Code: ABUOX

Sizes .....	2	2½	3	3½	4	5	6	8	10	12
Fig. 277 .....	23.00	25.00	29.00	35.00	40.00	54.00	65.00	110.00	170.00	215.00
Wgt., lbs. ....	29	39	60	74	92	156	188	329	501	629
Fig. 253 .....	25.50	27.50	32.00	38.00	45.00	59.00	72.00	117.00	178.00	225.00
Wgt., lbs. ....	41	58	81	102	128	196	245	418	635	882

### Dimensions, Inches

Size .....	2	2½	3	3½	4	5	6	8	10	12
Face to face, screwed. .	5⅞	5⅞	6⅞	7	7½	8½	9	10¾	12¼	13½
Face to face, flanged. .	8¼	8¾	9½	10	10½	11½	12	13½	15	16
Diameter of flanges. . .	6½	7½	8¼	9	10	11	12½	15	17½	20½
Thickness of flanges. . .	⅞	1	1⅞	1⅞	1¼	1⅞	1⅞	1⅞	1⅞	2
Centre to top of wheel. .	10⅞	11⅞	14	14⅞	16⅞	20½	23⅞	29⅞	35⅞	40⅞
Centre to top of spindle, open. . . . .	12⅞	14⅞	18¼	20	21⅞	26⅞	30¾	39⅞	46⅞	55⅞
Diam. of hand wheel. . .	7	7	8	8	10	12	12	14	16	18



JENKINS IRON BODY VALVES

GATE

Medium Pattern

Solid Wedge Disc      Outside Screw and Yoke      Bronze Mounted

For 175 Pounds Steam Working Pressure  
or 300 Pounds Oil, Water, Gas Working Pressure

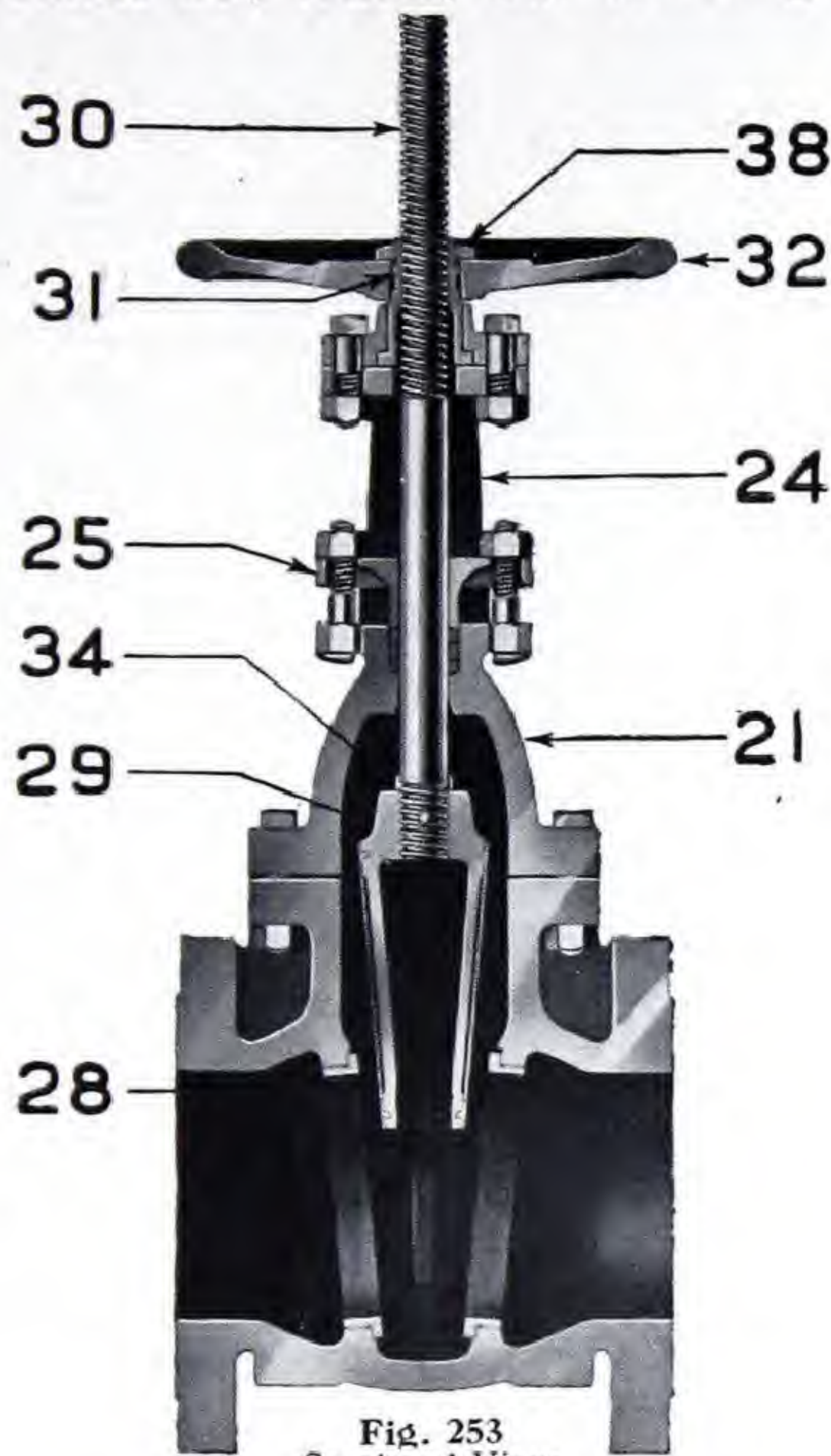


Fig. 253  
Sectional View

List Price of Parts

Part No. . . . . Sizes	2	2½	3	3½	4	5	6	8	10	12
21. Bonnet . . . . .	6.50	6.50	8.00	10.00	11.00	8.65	12.00	18.40	30.75	44.75
24. Yoke . . . . .						6.65	7.50	12.25	15.25	19.35
25. Gland . . . . .	.65	.65	.90	.90	1.50	1.65	1.65	1.90	2.15	2.15
28. Seat rings (pair) . . .	2.50	2.75	3.50	4.25	4.75	5.65	7.00	15.25	21.15	35.50
29. Wedge . . . . .	4.00	4.65	4.65	5.00	6.50	8.15	12.75	21.25	35.75	49.25
30. Spindle . . . . .	5.20	5.50	6.35	7.65	8.65	10.85	13.70	19.85	32.45	37.35
31. Yoke nut . . . . .	2.35	2.35	2.35	3.50	4.50	6.90	6.90	12.25	15.25	16.40
32. Wheel . . . . .	1.50	1.50	2.15	2.50	2.90	4.25	4.25	7.65	9.25	9.75
34. Spindle collar . . . . .	.50	.50	.65	.65	.65	.90	.90	1.25	1.25	1.65
38. Jam nut . . . . .	.35	.35	.40	.40	.40	.45	.45	.70	1.00	1.00

In sizes 2" to 4" inclusive, parts 21 and 24 are cast in one piece. The spindle and seat rings are made of bronze. The discs up to and including 3" are cast of solid bronze; 3½" and larger are cast iron with bronze faces rolled in.



# JENKINS IRON BODY VALVES

## GATE

### Extra Heavy Pattern

Solid Wedge Disc

Non-Rising Spindle

Bronze Mounted

For 250 Pounds Steam Working Pressure  
or 500 Pounds Oil, Water, Gas Working Pressure

1000 Pounds Hydrostatic Test



**Fig. 203a**  
Gate, Screwed  
Code: ABUIB



Conforming to Canadian Interprovincial Specifications Registration  
Number 0211-123456



These valves are of the double face, solid wedge disc type. The renewable seat rings, wedge face rings, and the wedges of the smaller sizes, are made of bronze for high temperature services. Guides cast in the body prevent chattering when the valve is partially open. When fully open, the wedge is entirely removed from the line of flow. Valves are usually supplied with flanges in accordance with American Extra Heavy Standard dimensions with  $\frac{1}{16}$ " raised face; valves with flanges to British tables or special dimensions supplied when specified. Flanged valves are furnished faced only, unless instructed to drill.



**Fig. 203**  
Gate, Flanged  
Code: ABUHW

Sizes.....	1½	2	2½	3	3½	4
Fig. 203a.....	25.00	27.50	33.00	45.00	57.00	60.00
Wgt., lbs.....	40	38	72	99	120	155
Fig. 203.....	27.50	30.00	35.50	48.00	60.00	65.00
Wgt., lbs.....	48	46	83	115	138	179

Sizes.....	5	6	8	10	12	14	16
Fig. 203a.....	85.00	100.00	155.00	250.00	.....	.....	.....
Wgt., lbs.....	227	321	520	810	.....	.....	.....
Fig. 203.....	90.00	107.00	162.00	258.00	335.00	440.00	675.00
Wgt., lbs.....	254	337	536	842	1139	.....	.....

### Dimensions, Inches

Sizes.....	1½	2	2½	3	3½	4
Face to face, screwed.....	7	7	8	9	10	11
Face to face, flanged.....	8½	8½	9½	11⅛	11⅞	12
Diameter of flanges.....	6⅛	6½	7½	8¼	9	10
Thickness of flanges.....	⅞	⅞	1	1⅛	1⅜	1¼
Diameter of raised face.....	3⅞	4⅜	4⅝	5⅞	6⅝	6⅝
Centre to top of wheel.....	10	10	12	14⅜	15⅞	17⅞
Diameter of hand wheel.....	8	8	8	10	10	12

Sizes.....	5	6	8	10	12	14	16
Face to face, screwed.....	13½	15⅞	16½	18	.....	.....	.....
Face to face, flanged.....	15	15⅞	16½	18	19¾	22½	24
Diameter of flanges.....	11	12½	15	17½	20½	23	25½
Thickness of flanges.....	1⅜	1⅞	1⅝	1⅞	2	2⅞	2¼
Diameter of raised face.....	8⅝	9⅞	11⅝	14⅞	16⅞	18⅝	21⅞
Centre to top of wheel.....	19⅜	21⅞	27⅜	33⅜	36⅜	41¼	44¼
Diameter of hand wheel.....	14	16	20	24	24	26	26



JENKINS IRON BODY VALVES

GATE  
Extra Heavy Pattern

Solid Wedge Disc                      Non-Rising Spindle                      Bronze Mounted

For 250 Pounds Steam Working Pressure  
or 500 Pounds Oil, Water, Gas Working Pressures

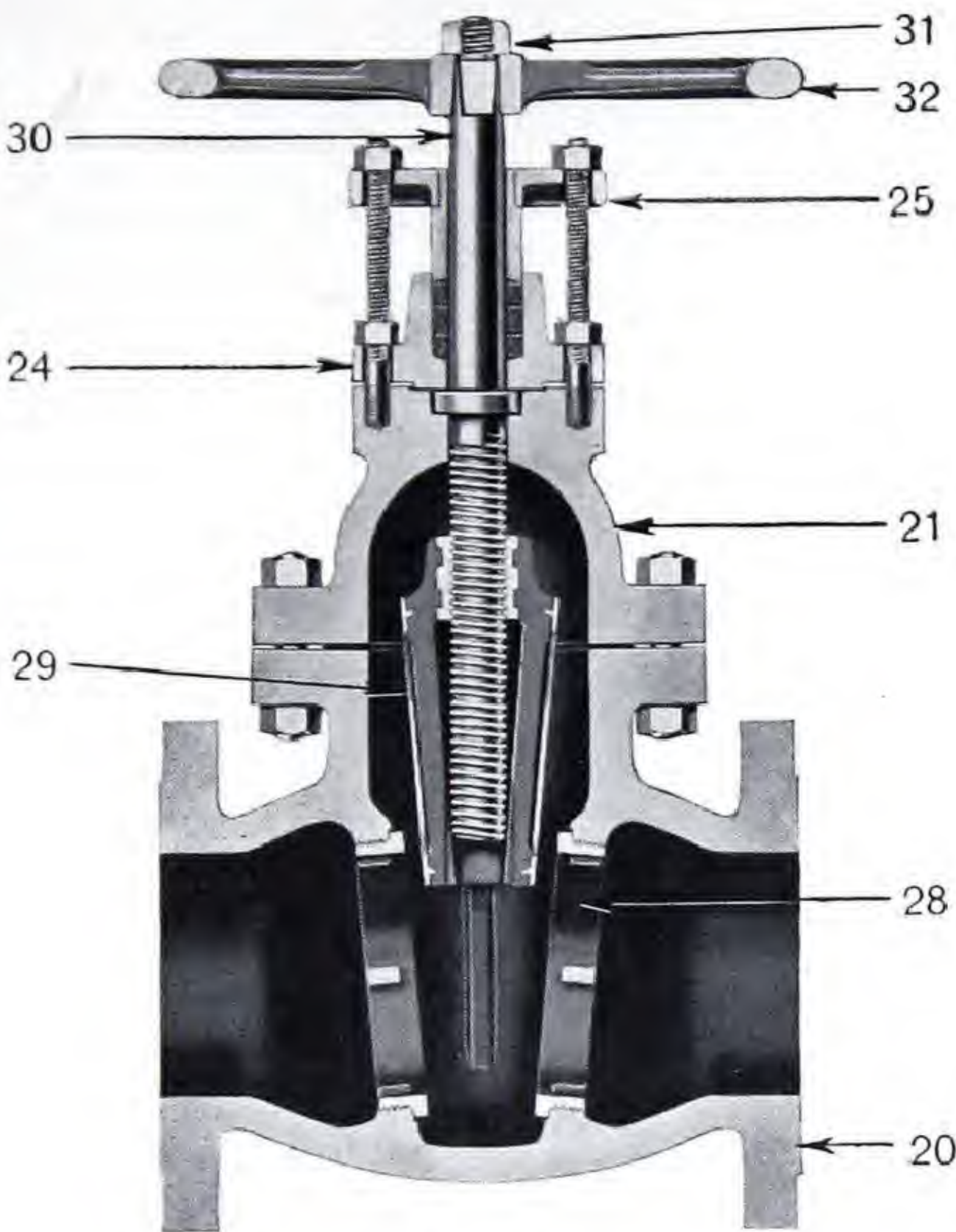


Fig. 203  
Sectional View

List Prices of Parts

Part No.....Sizes	1½	2	2½	3	4	5	6	8	10	12
21. Bonnet.....	4.90	4.90	4.90	6.15	8.50	11.00	13.40	24.35	40.25	61.00
24. Stuffing box.....	.75	.75	1.25	1.50	1.75	2.00	2.25	2.90	4.35	4.35
25. Gland.....	1.65	1.65	1.75	2.00	3.15	3.15	3.65	4.35	6.40	6.40
28. Seat rings (pair)...	2.90	2.90	4.35	5.90	8.50	11.00	17.15	25.65	39.00	68.25
29. Wedge.....	4.90	4.90	7.25	9.75	14.65	19.50	24.35	35.40	63.40	87.75
30. Spindle.....	3.40	3.40	4.35	5.90	7.75	9.75	12.25	22.00	32.90	43.90
31. Wheel nut.....	.05	.05	.05	.05	.05	.10	.10	.10	.10	.15
32. Hand wheel.....	1.00	1.00	1.35	1.50	2.50	3.65	4.90	6.65	9.75	11.00

Prices of parts of Fig. 203, 14" and larger on application.



# JENKINS IRON BODY VALVES

## GATE

### Extra Heavy Pattern

Solid Wedge Disc

Outside Screw and Yoke

Bronze Mounted

For 250 Pounds Steam Working Pressure  
or 500 Pounds Oil, Water, Gas Working  
Pressure

1000 Pounds Hydrostatic Test



Conforming to Canadian Interprovincial  
Specifications. Registration Number  
0211-123456



These valves are of the double face, solid wedge disc type. The renewable seat rings, wedge face rings, also the wedges of the smaller sizes are made of bronze for high temperature service. Guides cast in the body prevent chattering when the valve is partially open. When fully open, the wedge is entirely removed from the line of flow. The rising spindle of this type of valve serves as an indicator and the outside threads can be easily cleaned, and lubricated.

Valves are usually supplied with flanges in accordance with American Extra Heavy Standard dimensions with  $\frac{1}{16}$ " raised face; Valves with flanges to British tables or special dimensions supplied when specified. Flanged valves are furnished faced only, unless instructed to drill.



Fig. 204a  
Gate, Screwed  
Code: ABUIG



Fig. 204  
Gate, Flanged  
Code: ABUIC

Sizes.....	<b>1½</b>	<b>2</b>	<b>2½</b>	<b>3</b>	<b>3½</b>	<b>4</b>
Fig. 204-a.....	<b>33.00</b>	<b>35.50</b>	<b>41.00</b>	<b>54.00</b>	<b>67.00</b>	<b>72.00</b>
Wgt., lbs.....	40	38	77	103	122	162
Fig. 204.....	<b>35.50</b>	<b>38.00</b>	<b>43.50</b>	<b>57.00</b>	<b>70.00</b>	<b>77.00</b>
Wgt., lbs.....	48	47	87	120	143	189

Sizes.....	<b>5</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>16</b>
Fig. 204-a.....	<b>100.00</b>	<b>115.00</b>	<b>180.00</b>	<b>275.00</b>	.....	.....	.....
Wgt., lbs.....	242	346	570	840	.....	.....	.....
Fig. 204.....	<b>105.00</b>	<b>122.00</b>	<b>187.00</b>	<b>283.00</b>	<b>390.00</b>	<b>510.00</b>	<b>750.00</b>
Wgt., lbs.....	271	363	597	908	1247	1754	2146

### Dimensions, Inches

Sizes.....	<b>1½</b>	<b>2</b>	<b>2½</b>	<b>3</b>	<b>3½</b>	<b>4</b>
Face to face, screwed.....	7	7	8	9	10	11
Face to face, flanged.....	8½	8½	9½	11⅛	11⅞	12
Diameter of flanges.....	6⅛	6½	7½	8¼	9	10
Thickness of flanges.....	⅞	⅞	1	1⅛	1⅜	1¼
Diameter of raised face.....	3⅞	4⅜	4⅝	5⅞	6⅝	6⅞
Centre to top of hand wheel.....	11⅞	11⅞	13⅝	15⅝	16¾	19⅞
Centre to top of spindle, open.....	14½	14½	17⅝	20⅞	21⅞	25⅞
Diameter of hand wheel.....	7	7	8	10	10	12

Sizes.....	<b>5</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>16</b>
Face to face, screwed.....	13½	15⅞	16½	18	.....	.....	.....
Face to face, flanged.....	15	15⅞	16½	18	19¾	22½	24
Diameter of flanges.....	11	12½	15	17½	20½	23	25½
Thickness of flanges.....	1⅜	1⅞	1⅝	1⅞	2	2⅞	2¼
Diameter of raised face.....	8⅞	9⅞	11⅝	14⅞	16⅞	18⅞	21⅞
Centre to top of hand wheel.....	23¾	26⅞	33⅞	39⅞	44⅞	53⅞	56⅞
Centre to top of spindle, open.....	30½	34⅞	43⅞	51	58⅞	70⅞	75¼
Diameter of hand wheel.....	14	16	20	24	24	26	26



# JENKINS IRON BODY VALVES

**GATE**

**Extra Heavy Pattern**

**Solid Wedge Disc      Outside Screw and Yoke      Bronze Mounted**

For 250 Pounds Steam Working Pressure  
or 500 Pounds Oil, Water, Gas Working Pressure

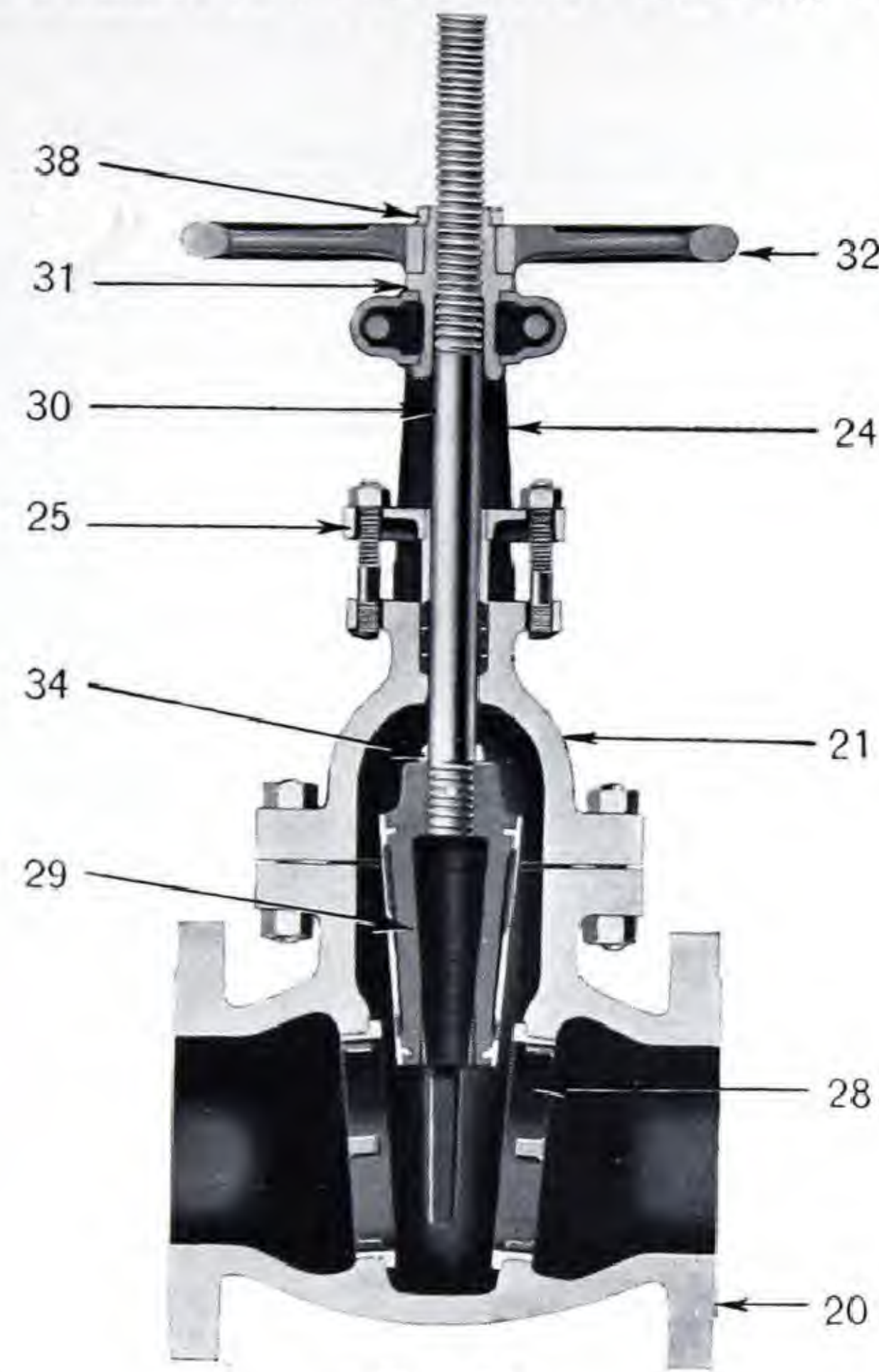


Fig. 204  
Sectional View

## List Prices of Parts

Part No. . . . . Sizes	1½	2	2½	3	3½	4	5	6	8	10	12
21. Bonnet. . . . .	6.50	6.50	6.50	8.00	10.00	11.00	13.15	13.40	24.35	40.25	61.00
24. Yoke. . . . .					6.65	7.40	8.00	9.75	12.25	19.50	24.40
25. Gland. . . . .	1.65	1.65	1.75	2.00	2.25	3.15	3.15	3.65	4.35	6.40	6.40
28. Seat rings (pair)	2.90	2.90	4.35	5.90	7.40	8.50	11.00	17.15	25.65	39.00	68.25
29. Wedge. . . . .	4.90	4.90	7.25	9.75	12.25	14.65	19.50	24.35	35.40	63.40	87.75
30. Spindle. . . . .	6.25	6.25	6.90	8.55	10.40	11.35	14.80	18.00	25.85	41.45	51.75
31. Yoke nut. . . . .	2.40	2.40	3.15	3.90	4.90	6.15	7.25	8.75	14.65	24.35	29.25
32. Hand wheel. . . .	2.00	2.00	2.50	3.90	3.90	4.15	5.40	6.65	8.75	12.25	13.15
34. Spindle collar. .	.50	.50	.50	.65	.65	.75	.90	.90	1.25	1.25	1.65
38. Jam nut. . . . .	.40	.40	.40	.40	.40	.45	.70	.70	1.00	1.35	1.35

Prices of parts of Fig. 204 14" and larger on application.



JENKINS IRON BODY VALVES

GATE

Extra Heavy Pattern

Solid Wedge Disc, Non-Rising Spindle, Bronze Mounted

By-Pass

For 250 Pounds Steam Working Pressure  
or 500 Pounds Oil, Water, Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 0211-123456



Fig. 285  
Gate, Flanged with By-Pass  
Code: ABUUL

These valves are of the double face, solid wedge type. The renewable seat rings, wedge face rings, are made of bronze for high temperature service. Guides cast in the body prevent chattering when the valve is partially open. When fully open, the wedge is entirely removed from the line of flow.

Valves are usually supplied with flanges in accordance with American Extra Heavy Standard dimensions with  $\frac{1}{16}$ " raised face; valves with flanges to British tables or special dimensions supplied when specified. Flanged valves are furnished faced only, unless instructed to drill.

Sizes .....	6	8	10	12
Fig. 285 .....	155.00	215.00	310.00	400.00
Wgt., lbs .....	397	600	903	1225

Dimensions, Inches

Sizes .....	6	8	10	12
Face to face, flanged .....	15 $\frac{7}{8}$	16 $\frac{1}{2}$	18	19 $\frac{3}{4}$
Diameter of flanges .....	12 $\frac{1}{2}$	15	17 $\frac{1}{2}$	20 $\frac{1}{2}$
Thickness of flanges .....	1 $\frac{7}{16}$	1 $\frac{5}{8}$	1 $\frac{7}{8}$	2
Diameter of raised face .....	9 $\frac{11}{16}$	11 $\frac{15}{16}$	14 $\frac{1}{16}$	16 $\frac{7}{16}$
Centre to top of hand wheel .....	21 $\frac{7}{8}$	27 $\frac{3}{8}$	33 $\frac{3}{16}$	36 $\frac{3}{16}$
Diameter of hand wheel .....	16	20	24	24
Size of by-pass .....	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2
Centre of valve to centre of by-pass .....	12 $\frac{5}{16}$	13 $\frac{5}{16}$	14 $\frac{15}{16}$	15 $\frac{13}{16}$
Centre of by-pass to extreme outside .....	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4



J E N K I N S I R O N B O D Y V A L V E S

GATE  
Extra Heavy Pattern

Solid Wedge Disc, Outside Screw and Yoke, Bronze Mounted  
with By-Pass

For 250 Pounds Steam Working Pressure  
or 500 Pounds Oil, Water, Gas Working Pressure

Conforming to Canadian Interprovincial Specifications  
Registration Number 0211-123456



Fig. 204b  
Gate, Flanged with By-Pass  
Code: ABUIM

These valves are of the double face, solid wedge disc type. The renewable seat rings, wedge face rings are made of bronze for high temperature services. Guides cast in the body prevent chattering when the valve is partially open. When fully open, the wedge is entirely removed from the line of flow. The rising spindle of this type of valve serves as an indicator and the outside threads can be easily cleaned. Valves are usually supplied with flanges in accordance with American Extra Heavy Standard dimensions with 1/16" raised face, valves with flanges to British tables or special dimensions supplied when specified. Flanged valves are furnished faced only, unless instructed to drill.

Sizes.....	6	8	10	12	14	16	18	20	24
Fig. 204-b.....	170.00	240.00	335.00	455.00	580.00	825.00	1050.00	1250.00	1700.00
Wgt., lbs.....	419	659	970	1335	1851	2530	3009	.....	.....

Dimensions, Inches

Sizes.....	6	8	10	12	14	16	18	20	24
Face to face, flanged.....	15 7/8	16 1/2	18	19 3/4	22 1/2	24	26	28	31
Diameter of flanges.....	12 1/2	15	17 1/2	20 1/2	23	25 1/2	28	30 1/2	36
Thickness of flanges.....	1 7/16	1 5/8	1 7/8	2	2 1/8	2 1/4	2 3/8	2 1/2	2 3/4
Diameter of raised face.....	9 11/16	11 15/16	14 1/16	16 7/16	18 15/16	21 1/16	23 5/16	25 9/16	30 5/16
Centre to top of wheel.....	26 13/16	33 7/16	39 1/16	44 1/8	53 15/16	56 11/16	64 1/4	69 1/4	82 1/2
Centre to top of spindle, open.....	34 11/16	43 1/16	51	58 3/16	70 5/8	75 1/4	84	92 3/4	108 1/4
Diameter of hand wheel.....	16	20	24	24	26	26	32	32	36
Size of By-Pass.....	1 1/2	1 1/2	1 1/2	2	2	3	3	4	4
Centre of valve to centre of by-pass.....	12 5/16	13 5/16	14 15/16	15 13/16	19 5/16	22 1/16	23 3/16	26 9/16	28 5/8
Centre of by-pass to extreme outside.....	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	5	5	6	6

List Prices of Parts, see page 179.



# JENKINS IRON BODY VALVES

## GATE

Standard Pattern

Double Disc

Parallel Seat

Bronze Mounted

Non-Rising Spindle



Fig. 872  
Gate, Screwed  
Code: ABXDU

Sizes 2" to 12" for 175 Pounds Oil, Water,  
Gas Working Pressure or 125 Pounds  
Steam Working Pressure.

Sizes 14" and 16" for 150 Pounds Oil, Water,  
Gas Working Pressure or 125 Pounds  
Steam Working Pressure.

Sizes 18" and larger for 125 Pounds Oil, Water,  
Gas Working Pressure or 100 Pounds  
Steam Working Pressure

Flanged valves are regularly supplied with flanges  
to American Standard Dimensions. Special flange  
dimensions or to British tables can also be supplied.

Details of Materials, design and construction  
are given on page 154.



Fig. 873  
Gate, Flanged  
Code: ABXDY

Sizes.....	2	2½	3	3½	4	5	6	8
Fig. 872.....	19.00	24.00	28.50	32.50	36.00	48.50	57.00	90.00
Wgt., lbs.....	25	43	48	53	77	102	151	235
Fig. 873.....	20.00	25.00	30.00	34.00	38.00	51.00	60.00	90.00
Wgt., lbs.....	33	44	60	70	94	123	170	265

Sizes.....	10	12	14	16	18	20	24
Fig. 872.....	128.00	170.00					
Wgt., lbs.....	380	560					
Fig. 873.....	128.00	170.00	238.00	332.00	442.00	544.00	850.00
Wgt., lbs.....	430	640	872	1127	1631	2041	3130

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8
Face to face, screwed.....	4¾	5½	6	6⅝	7⅛	8⅛	9	10
Face to face, flanged.....	5⅝	6¼	6⅞	7½	8¼	10¾	11⅞	11
Diameter of flanges.....	6	7	7½	8½	9	10	11	13½
Thickness of flanges.....	⅝	1⅞	¾	1⅜	1⅝	1⅝	1	1⅞
Centre to top of wheel.....	10⅞	11⅞	12⅝	13¼	15⅜	18	20⅜	24
Diameter of hand wheel....	7	7	8	8	9	10	12	14

Size.....	10	12	14	16	18	20	24
Face to face, screwed.....	11½	12½					
Face to face, flanged.....	13¾	14⅝	15¾	15¾	18¼	19	21¾
Diameter of flanges.....	16	19	21	23½	25	27½	32
Thickness of flanges.....	1⅜	1¼	1⅜	1⅞	1⅞	1⅞	1⅞
Centre to top of wheel.....	28⅜	31¼	36⅞	41¼	46	51⅞	59⅝
Diameter of hand wheel.....	16	18	20	22	24	26	32

These valves can also be supplied in all iron, when required.



JENKINS IRON BODY VALVES

GATE  
Standard Pattern  
Parallel Seat

Double Disc  
Bronze Mounted

Sizes 2" to 12" for 175 Pounds Oil, Water, Gas Working Pressure  
or 125 Pounds Steam Working Pressure  
Sizes 14" and 16" for 150 Pounds Oil, Water, Gas Working Pressure  
or 125 Pounds Steam Working Pressure  
Sizes 18" and larger for 125 Pounds Oil, Water, Gas Working Pressure  
or 100 Pounds Steam Working Pressure

Non-Rising Spindle

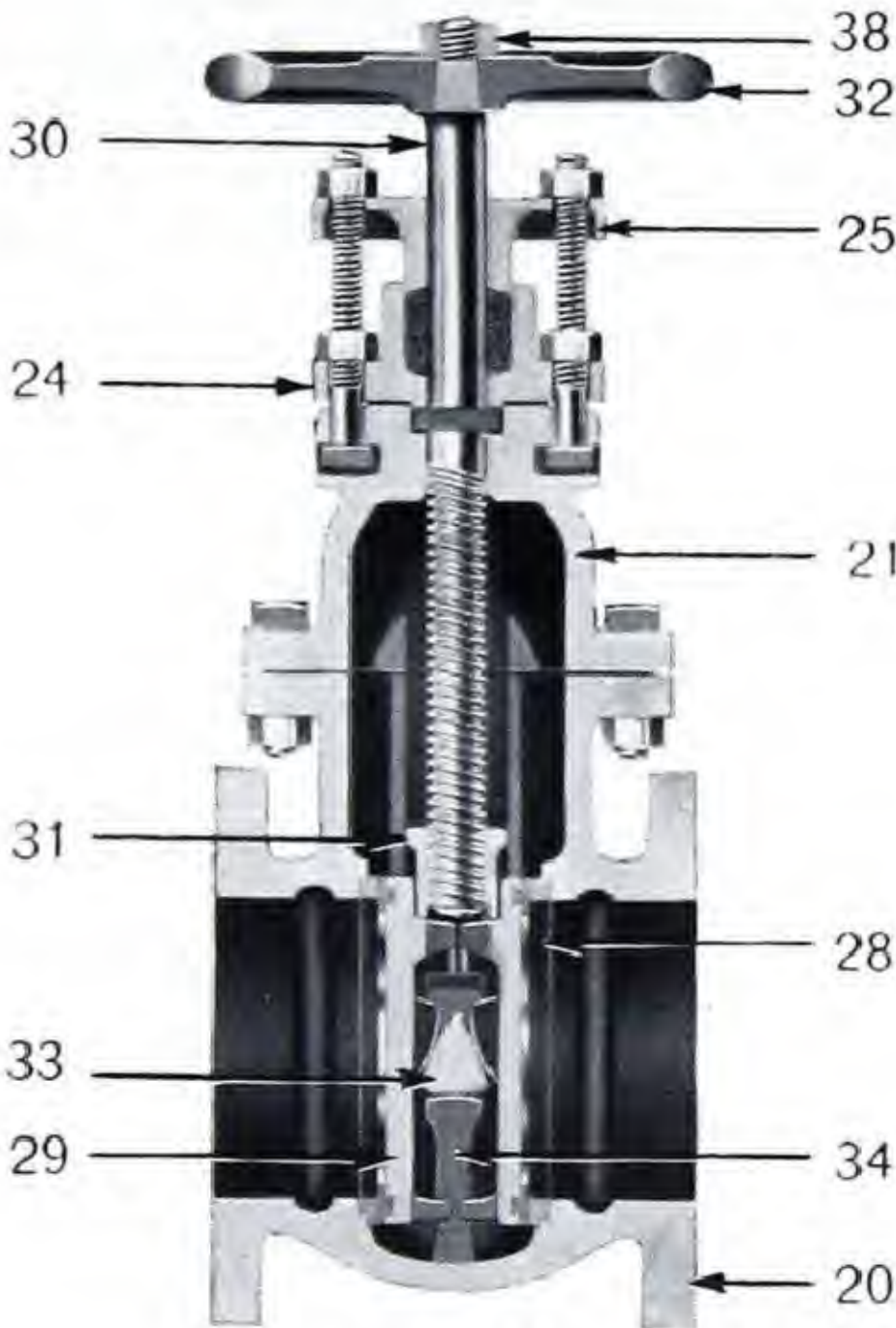


Fig. 873  
Sectional View

List Prices of Parts

Part No.....Sizes	2	2½	3	3½	4	5	6	8	10	12	14
21. Bonnet.....	1.90	1.90	2.30	2.85	3.25	3.95	6.90	11.50	18.65	27.85	38.65
24. Stuffing box.....	.55	.70	.80	.80	.95	1.20	1.20	1.65	2.30	2.30	5.40
25. Gland.....	.55	.55	.55	.55	.70	.80	.80	1.20	1.35	1.35	3.00
27. Wedge (one).....	*	*	*	*	*	*	*	*	.....	.....	.....
28. Seat rings (pair)...	2.55	2.85	3.65	4.05	4.60	5.40	6.25	10.40	15.60	19.30	23.00
29. Discs (pair).....	2.85	3.25	3.25	3.50	4.60	5.95	8.80	14.05	23.25	34.75	63.55
30. Spindle.....	2.55	3.10	3.65	4.20	5.15	7.70	10.55	15.00	20.95	24.35	40.00
31. Spindle nut.....	.45	.50	.55	.60	.90	1.50	1.55	1.75	2.95	3.20	7.50
32. Hand wheel.....	.95	.95	.95	1.20	1.35	2.05	2.55	3.95	5.15	6.35	10.70
33. Wedges (pair).....	.....	.....	.....	.....	.....	.....	.....	.....	*	*	*
34. Carriers (pair).....	.....	.....	.....	.....	.....	.....	.....	.....	*	*	*
38. Wheel nut.....	.10	.10	.10	.10	.10	.15	.15	.15	.15	.20	.25

\*Prices of parts, also on sizes 16" and up on application.



# JENKINS IRON BODY VALVES

## GATE Standard Pattern

Double Disc

Parallel Seat  
Outside Screw and Yoke

Bronze Mounted



Fig. 874  
Gate, Screwed  
Code: ABXEA

Sizes 2" to 12" for 175 Pounds Oil, Water,  
Gas Working Pressure or 125 Pounds  
Steam Working Pressure.

Sizes 14" and 16" for 150 Pounds Oil, Water,  
Gas Working Pressure or 125 Pounds  
Steam Working Pressure.

Sizes 18" and larger for 125 Pounds Oil, Water,  
Gas Working Pressure or 100 Pounds  
Steam Working Pressure.

Flanged valves are regularly supplied with flanges  
to American Standard Dimensions. Special flange  
dimensions or to British tables can also be supplied.

Details of materials, design and construction  
are given on page 154.



Fig. 875  
Gate, Flanged  
Code: ABXEB

Sizes.....	2	2½	3	3½	4	5	6	8
Fig. 874.....	25.00	31.50	36.00	41.00	45.50	61.50	72.00	112.00
Wgt., lbs.....	32	38	51	56	82	116	165	264
Sizes.....	10	12	14	16	18	20	24	
Fig. 874.....	160.00	212.00						
Wgt., lbs.....	440	600						
Fig. 875.....	160.00	212.00						
Wgt., lbs.....	490	680	960	1223	1714	2168	3526	

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8
Face to face, screwed.....	4¾	5½	6	6⅝	7⅛	8⅛	9	10
Face to face, flanged.....	5⅝	6¼	6⅞	7½	8¼	10¾	11⅞	11
Diameter of flanges.....	6	7	7½	8½	9	10	11	13½
Thickness of flanges.....	⅝	1⅞	¾	1⅜	1⅝	1⅝	1	1⅞
Centre to top of wheel.....	10⅜	11	12⅞	13⅞	16	19	21⅞	27⅞
Centre to top of spindle, open.....	13⅞	14⅝	16¾	18⅞	21¼	25⅞	29¼	37¼
Diameter of hand wheel.....	7	7	8	8	9	10	12	14
Sizes.....	10	12	14	16	18	20	24	
Face to face, screwed.....	11½	12½						
Face to face, flanged.....	13¾	14⅝	15¾	15¾	18¼	19	21¾	
Diameter of flanges.....	16	19	21	23½	25	27½	32	
Thickness of flanges.....	1⅜	1¼	1⅜	1⅞	1⅞	1⅞	1⅞	
Centre to top of wheel.....	32⅞	38	44⅞	50⅞	56¾	65⅝	75⅞	
Centre to top of spindle, open.....	44⅞	51⅝	60½	68⅞	77½	88	101⅞	
Diameter of hand wheel.....	16	18	20	22	24	26	32	

These valves can also be supplied in all iron, when required.



JENKINS IRON BODY VALVES

GATE

Standard Pattern

Double Disc

Parallel Seat

Bronze Mounted

Sizes 2'' to 12'' for 175 Pounds Oil, Water, Gas Working Pressure  
or 125 Pounds Steam Working Pressure

Sizes 14'' and 16'' for 150 Pounds Oil, Water, Gas Working Pressure  
or 125 Pounds Steam Working Pressure

Sizes 18'' and larger 125 Pounds Oil, Water, Gas Working Pressure  
or 100 Pounds Steam Working Pressure

Outside Screw and Yoke

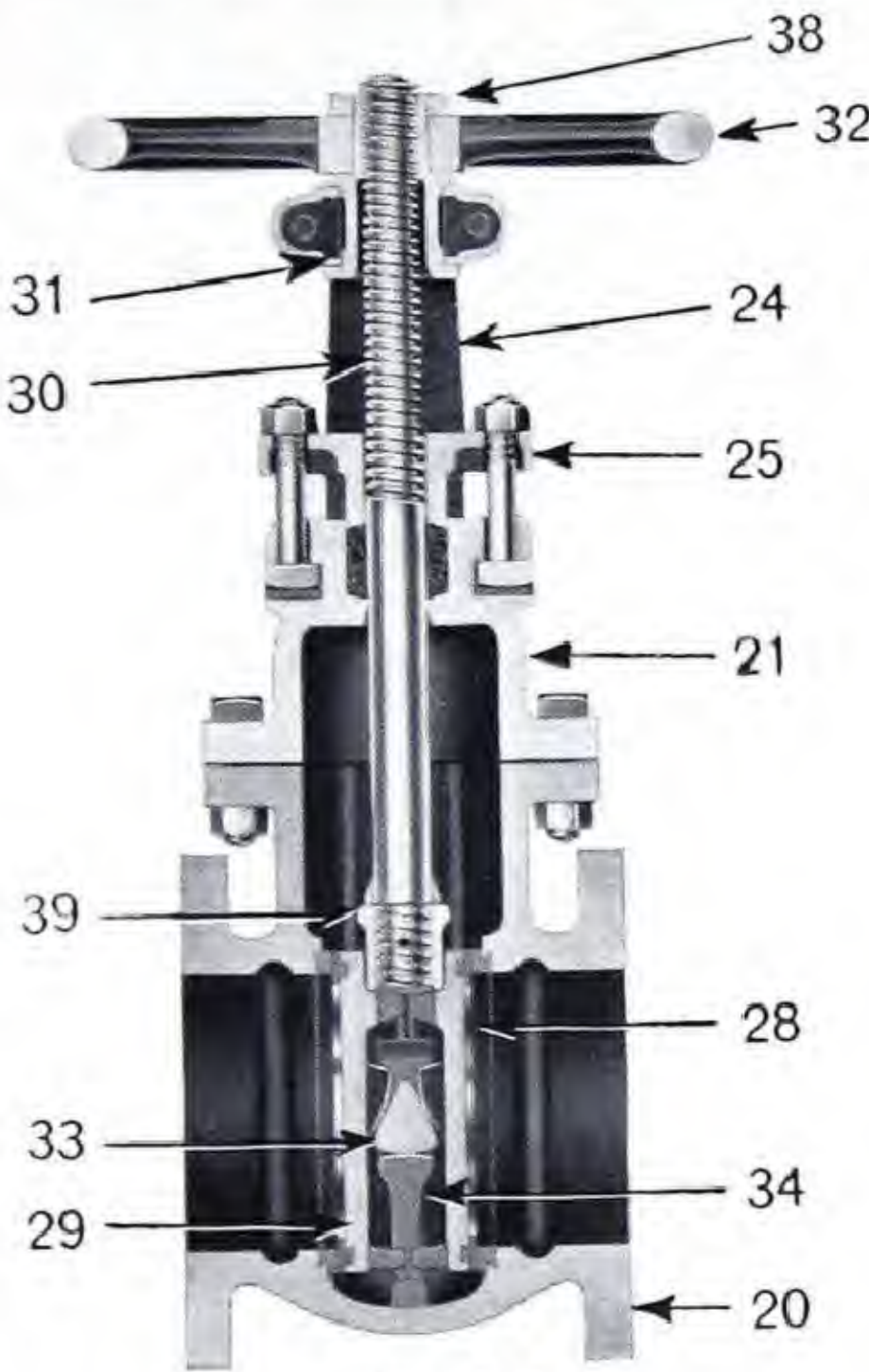


Fig. 875  
Sectional View

List Prices of Parts

Part No.....Sizes	2	2½	3	3½	4	5	6	8	10	12
21. Bonnet.....	5.15	5.15	6.35	7.45	8.65	7.50	9.20	14.05	23.25	34.75
24. Yoke.....						5.20	5.80	9.20	11.75	15.40
25. Gland.....	.55	.55	.55	.55	.70	.80	.80	1.20	1.35	1.35
27. Wedge (one).....	*	*	*	*	*	*	*	*		
28. Seat rings (pair)....	2.55	2.85	3.65	4.05	4.60	5.40	6.25	10.40	15.60	19.30
29. Discs (pair).....	2.85	3.25	3.25	3.50	4.60	5.95	8.80	14.05	23.25	34.75
30. Spindle.....	4.20	4.75	5.15	5.80	7.45	10.55	11.65	18.65	31.35	34.75
31. Yoke nut.....	1.80	1.80	1.80	2.55	3.50	5.55	5.55	9.20	11.75	12.70
32. Hand wheel.....	1.25	1.25	1.65	1.80	2.00	3.50	3.50	5.80	6.90	8.15
33. Wedges (pair).....									*	*
34. Carriers (pair).....									*	*
35. Spindle collar.....									1.25	1.25
38. Jam nut.....	.35	.35	.40	.40	.40	.45	.45	.70	1.00	1.00
39. Spindle nut.....									2.50	4.00

Prices of parts (\*), also sizes 14'' and up on application.



# JENKINS IRON BODY VALVES

## GATE

Extra Heavy Pattern

Double Disc

Parallel Seat

Bronze Mounted

For 500 Pounds Oil, Water, Gas Working Pressure  
or 250 Pounds Steam Working Pressure  
1000 Pounds Hydrostatic Test

Non-Rising Spindle



Fig. 876  
Gate, Screwed  
Code: ABXEC

These Valves are identical to figures 878 and 879 on page 187, excepting that the spindles remain stationary when opening and closing. This design if required can also be supplied with All Iron working parts.

Details of materials, design and construction are given on page 154.



Fig. 877  
Gate, Flanged  
Code: ABXED

Sizes	2	2½	3	4	5	6	8	10	12
Fig. 876	37.00	47.00	55.50	70.00	94.50	117.00	180.00	255.00	340.00
Wgt., lbs.	38	72	99	155	227	321	.....	.....	.....
Fig. 877	38.00	48.00	57.00	72.00	97.00	120.00	180.00	255.00	340.00
Wgt., lbs.	46	83	115	179	254	337	536	842	1139

### Dimensions, Inches

Sizes	2	2½	3	4	5	6	8	10	12
Face to face, screwed	8	8⅞	9⅝	10½	12⅛	13¼	15¼	17¾	19
Face to face, flanged	7¼	8	9¼	9½	12⅛	13	14¼	16¾	17½
Diameter of flanges	6½	7½	8¼	10	11	12½	15	17½	20½
Thickness of flanges	⅞	1	1⅛	1¼	1⅜	1⅞	1⅝	1⅞	2
Diameter of raised face	4⅜	4⅝	5⅛	6⅝	8⅝	9⅛	11⅝	14⅛	16⅞
Centre to top of wheel	10½	12½	14½	17	19¾	22⅜	27½	33⅛	36½
Diameter of wheel	7	7	10	12	14	16	20	24	24



JENKINS IRON BODY VALVES

GATE

Extra Heavy Pattern  
Parallel Seat

Double Disc

Bronze Mounted

For 500 Pounds Oil, Water, Gas Working Pressure  
or 250 Pounds Steam Working Pressure  
1000 Pounds Hydrostatic Test

Outside Screw and Yoke

This type of valve is designed for extra heavy service. A 1,000 pound hydrostatic test is applied to each valve before shipment. The uniform castings of high grade iron, the design, and machining to precision make them particularly desirable for severe service.

Details of materials, design and construction are given on page 154.



Fig. 878  
Gate, Screwed  
Code: ABXEF



Fig. 879  
Gate, Flanged  
Code: ABXEG

Sizes . . . . .	2	2½	3	4	5	6	8	10	12
Fig. 878 . . . . .	49.00	62.00	69.50	88.00	118.50	147.00	225.00	320.00	425.00
Wgt., lbs. . . . .	45	77	104	162	242	346	.....	.....	.....
Fig. 879 . . . . .	50.00	63.00	71.00	90.00	121.00	150.00	225.00	320.00	425.00
Wgt., lbs. . . . .	47	87	116	184	271	366	599	909	1266

Dimensions, Inches

Sizes . . . . .	2	2½	3	4	5	6	8	10	12
Face to face, screwed . . . . .	8	8⅞	9⅝	10½	12⅛	13¼	15¼	17¾	19
Face to face, flanged . . . . .	7¼	8	9¼	9½	12⅛	13	14¼	16¾	17½
Diameter of flanges . . . . .	6½	7½	8¼	10	11	12½	15	17½	20½
Thickness of flanges . . . . .	⅞	1	1⅛	1¼	1⅜	1⅞	1⅝	1⅞	2
Diameter of raised face . . . . .	4⅜	4⅝	5⅛	6⅝	8⅝	9⅞	11⅝	14⅞	16⅞
Centre to top of wheel . . . . .	11½	14¾	16	20⅜	24½	27⅞	34¼	39⅜	43¾
Centre to top of spindle, open . . . . .	14¾	18½	20¼	25⅝	31¼	34⅞	43⅞	51⅞	57¾
Diameter of hand wheel . . . . .	7	8	10	12	14	16	20	24	24



# JENKINS ALL IRON VALVES

## GATE Extra Heavy Pattern

Double Disc

Parallel Seat

All Iron

For 500 Pounds Working Pressure

Recommended for Ammonia, Cyanide, Caustic Soda, Potash and  
Alkaline Fluids

1000 Pounds Hydrostatic Test

Outside Screw and Yoke



Fig. 598  
Gate, Screwed  
Code: ABWCO

Exactly the same as figures 878  
and 879 on page 187, except that  
all interior working parts are all  
iron.

Details of materials, design  
and construction are given on  
page 154.



Fig. 599  
Gate, Flanged  
Code: ABWCU

Non-rising Spinde valves can also be furnished when desired. Prices on Application

Sizes.....	2	2½	3	4	5	6	8	10	12
Fig. 598.....	49.00	62.00	69.50	88.00	118.50	147.00	225.00	320.00	425.00
Wgt., lbs.....	45	77	104	162	242	346	.....	.....	.....
Fig. 599.....	50.00	63.00	71.00	90.00	121.00	150.00	225.00	320.00	425.00
Wgt., lbs.....	47	87	116	184	271	366	599	909	1266

### Dimensions, Inches

Sizes.....	2	2½	3	4	5	6	8	10	12
Face to face, screwed.....	8	8⅞	9⅝	10½	12⅛	13¼	15¼	17¾	19
Face to face, flanged.....	7¼	8	9¼	9½	12⅛	13	14¼	16¾	17½
Diameter of flanges.....	6½	7½	8¼	10	11	12½	15	17½	20½
Thickness of flanges.....	⅞	1	1⅛	1¼	1⅜	1⅞	1⅝	1⅞	2
Diameter of raised face.....	4⅜	4⅝	5⅞	6⅝	8⅝	9⅞	11⅝	14⅞	16⅞
Centre to top of wheel.....	11½	14¾	16	20⅜	24½	27⅞	34¼	39⅜	43¾
Centre to top of spindle, open.....	14¾	18½	20¼	25⅝	31¼	34⅞	43⅞	51⅞	57¾
Diameter of hand wheel.....	7	8	10	12	14	16	20	24	24



JENKINS  
CAST STEEL VALVES

•

Pages 190 to 197 Inclusive



# JENKINS CAST STEEL VALVES

## GATE

### Double Discs

### Parallel Seat

For 150 Pounds Steam Working Pressure and Total Temperatures of 500°F.  
Or 300 Pounds Non-Shock Oil, Water, Gas Working Pressure at Normal  
Temperature of 100° F.

Also for Steam and Hot Oil at 100 Pounds and Maximum Temperatures of 750°F.

### Outside Screw and Yoke



Fig. 560  
Gate, Flanged  
Code: ABVZM

*These valves are especially recommended for severe services in steam and chemical plants, oil refineries and other industries where corrosion and erosion are encountered, and dangerous liquids and gases are conducted.*

They can be fitted with any combination of metal alloys to meet the requirements of particular installations.

The bodies and bonnets are cast carbon steel. Castings are heat-treated and possess a minimum tensile strength of 70,000 lbs.

The spindle, disc and seat rings are forged of suitable material such as carbon steel or stainless steel, according to the service for which the valve is to be used. The wedge is of forged carbon steel.

Seat rings in all sizes are renewable. The seating arrangement is of the parallel seat design as explained on page 154.

### Dimensions, Inches

Sizes . . . . .	2	2½	3	4	5	6	8	10	12
Face to face, flanged . . . . .	5⅝	6¼	6⅞	8¼	10¾	11⅞	11	13¾	14⅝
Diameter of flanges . . . . .	6	7	7½	9	10	11	13½	16	19
Diameter of raised face . . . . .	3⅝	4⅞	5	6⅜	7⅝	8½	10⅝	12¾	15
Thickness of flanges . . . . .	⅝	1⅞	¾	1⅝	1⅝	1	1⅞	1⅞	1¼
Centre of body to top of wheel . . . . .	10⅜	11	12⅞	16	19	21⅞	27⅞	32⅞	38
Centre of body to top of spindle, open . . . . .	13⅞	14⅞	16¾	21¼	25⅞	29¼	37¼	44⅞	51⅞
Diameter of hand wheel . . . . .	7	7	8	9	10	12	14	16	18
Wgt., lbs . . . . .	45	55	70	110	155	205	340	550	760

Prices on Application



JENKINS CAST STEEL VALVES

GATE

Double Disc

Parallel Seat

For 250 Pounds Steam and Hot Oil Working Pressure  
Maximum Temperature 750° F.  
Or 400 Pounds Non-Shock Oil, Water, Gas Working Pressure  
at Normal Temperatures of 100° F.  
1,000 Pounds Hydrostatic Test.

Outside Screw and Yoke



Fig. 562  
Gate, Flanged  
Code: ABVZR

*These valves are especially recommended for severe services in steam and chemical plants, oil refineries and other industries where corrosion and erosion are encountered, and dangerous liquids and gases are conducted.*

They can be fitted with any combination of metal alloys to meet the requirements of particular installations.

The bodies and bonnets are cast carbon steel. Castings are heat-treated and possess a minimum strength of 70,000 lbs.

The spindle, disc and seat rings are forgings of suitable material, such as carbon steel or stainless steel according to the service for which the valve is to be used. The wedge is of forged carbon steel.

Seat rings in all sizes are renewable.

Dimensions, Inches

Sizes.....	2	2½	3	4	5	6	8	10	12
Face to face, flanged.....	7¼	8	9¼	9½	12⅛	13	14¼	16¾	17½
Diameter of flanges.....	6½	7½	8¼	10	11	12½	15	17½	20½
Diameter of raised face.....	3⅝	4⅛	5	6⅜	7⅝	8½	10⅝	12¾	15
Thickness of flanges.....	⅞	1	1⅛	1¼	1⅜	1⅞	1⅝	1⅞	2
Centre to top of hand wheel..	15	17	18¾	21⅝	26	29½	36⅜	45	51
Centre to top of spindle when open.....	18¼	20¾	23	27⅞	32½	37⅞	46⅛	57	65
Diameter of hand wheel.....	8	8	10	11	13	15	17	21	23
Wgt., lbs.....	49	60	77	121	170	225	374	605	836

Prices on Application



# JENKINS CAST STEEL VALVES

## GATE

### Extra Heavy Pattern

Solid Wedge Disc

Non-Rising Spindle

Bronze Mounted

For 300 Pounds Steam Working Pressure or 500 Pounds Oil, Water, Gas Working Pressure

Conforming to Canadian Interprovincial Specifications  
Registration Number: 0213-123456



Fig. 386.  
Gate, Flanged  
(Line ABVHI)

These valves are particularly suited for superheated steam service. The bodies, bonnets and wedges are cast carbon steel. The spindles, seat rings and the disc faces are of monel metal.

On sizes above 3 inches it is advisable that they should be fitted with By-pass. It is the usual practice to supply valves with flanges having  $\frac{1}{8}$ " raised faces and when the flanges are ordered drilled the bolt holes will always be spot-faced unless we are instructed otherwise.



Fig. 387.  
Gate, Flanged, with By-Pass  
(Line ABVIA)

Sizes:	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12
Fig. 386	Prices on application.										
Wgt. lbs.	12	30	90	125	148	194	275	365	580	910	1230
Fig. 387	Prices on application.										
Wgt. lbs.								425	644	975	1315

### Dimensions, Inches

Sizes:	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12
Face to face, flanged	8 1/2	8 1/2	9 1/2	10 1/2	11 5/8	12	15	15 7/8	16 1/2	18	19 3/4
Diameter of flanges	6 1/2	6 1/2	7 1/2	8 1/2	9	10	11	12 1/2	15	17 1/2	20 1/2
Diameter of raised face	2 7/8	3 5/8	4 1/2	5	5 7/8	6 7/8	7 7/8	9 1/2	10 5/8	12 5/8	15
Thickness of flanges	7/8	7/8	1	1 1/8	1 1/8	1 3/4	1 5/8	1 7/8	1 5/8	1 7/8	2
Centre to top of wheel	10	10	12	14 1/8	15 1/8	17 1/8	19 1/8	21 7/8	27 7/8	33 3/8	36 7/8
Diameter of wheel	8	8	8	10	10	12	14	16	20	24	24
Size of by-pass								1 1/2	1 1/2	1 1/2	2
Centre of main valve to centre of by-pass								12 3/8	13 3/8	14 1/8	15 3/8
Centre of by-pass to extreme outside								3 1/2	3 1/2	3 1/2	4



JENKINS CAST STEEL VALVES

GATE—Extra Heavy Pattern

Solid Wedge Disc

Outside Screw and Yoke

Bronze Mounted



Fig. 388 Gate, Flanged Code: ABVIE

For 300 Pounds Steam Working Pressure or 500 Pounds Oil, Water, Gas Working Pressure

Conforming to Canadian Interprovincial Specifications Registration Number 0213-123456

These valves are particularly suited for superheated steam service. The bodies, bonnets and wedges are cast carbon steel. The spindles, seat rings and the wedge faces are of monel metal. On sizes above 5 inches it is advisable that they should be fitted with By-pass. It is the usual practice to supply valves with flanges having 1/16" raised faces, and when the flanges are ordered drilled, the bolt holes will always be spot-faced unless we are instructed otherwise.



Fig. 389 Gate, Flanged with By-Pass Code: ABVIJ

Sizes.....	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
Fig. 388.....	Prices on application.....															
Wgt., lbs.....	54	52	92	130	155	205	290	390	650	980	1345	1900	2300	.....	.....	.....
Fig. 389.....	Prices on application.....															
Wgt., lbs.....	.....	.....	.....	.....	.....	.....	.....	446	712	1042	1444	1997	2500	.....	.....	.....

Dimensions, Inches

Sizes.....	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
Face to face, flanged...	8½	8½	9½	11½	11¾	12	15	15¾	16½	18	19¾	22½	24	26	28	31
Diameter of flanges...	6½	6½	7½	8¼	9	10	11	12½	15	17½	20½	23	25½	28	30½	36
Diameter of raised face.	2¾	3⅝	4⅛	5	5½	6¾	7¾	8½	10⅝	12¾	15	16¼	18½	21	23	27¼
Thickness of flanges...	7/8	7/8	1	1⅛	1¾	1¼	1⅜	1⅞	1⅝	1⅞	2	2⅛	2¼	2⅜	2½	2¾
Centre to top of wheel..	11⅞	11⅞	13⅞	15⅝	16¾	19⅞	23¾	26⅞	33⅞	39⅞	44⅞	53⅞	56⅞	64¼	69¼	82½
Centre to top of spindle, open.....	14½	14½	17⅝	20⅞	21⅞	25⅞	30½	34⅞	43⅞	51	58⅞	70⅝	75¼	84	92¾	108¼
Diameter of wheel.....	7	7	8	10	10	12	14	16	20	24	24	26	26	32	32	36
Size of by-pass.....	.....	.....	.....	.....	.....	.....	.....	1½	1½	1½	2	2	3	3	4	4
Centre of main valve to centre of by-pass....	.....	.....	.....	.....	.....	.....	.....	12⅞	13⅞	14⅞	15⅞	19⅞	22⅞	23⅞	26⅞	28⅞
Centre of by-pass to extreme outside.....	.....	.....	.....	.....	.....	.....	.....	3½	3½	3½	3½	3½	5	5	6	6

Large sizes are usually operated by gears, electric motor or hydraulic pressure, see pages 198-201. Prices on application.



# JENKINS CAST STEEL VALVES

## GLOBE

### Extra Heavy Pattern

Outside Screw and Yoke

Monel Metal Mounted

For 300 Pounds Steam Working Pressure or 400 Pounds Oil, Water,  
Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 01059-123456



Fig. 380  
Globe, Flanged  
Code: ABVGO

These valves are particularly suited for the severe conditions of superheated steam service. The bodies and bonnets are of cast carbon steel. The spindles, seat rings and discs of monel metal. All flanges are supplied with  $\frac{1}{16}$ " raised faces inside of bolt holes; the flanges when ordered drilled have the bolt holes spot-faced unless requested to furnish otherwise.



Fig. 381  
Globe, Flanged  
with By-Pass  
Code: ABVGX

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Fig. 380.....	Prices on application.....									
Wgt., lbs. ....	69	84	115	138	196	280	410	660	960	1335
Fig. 381.....	Prices on application.....									
Wgt., lbs. ....					200	285	416	670	972	1355

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Face to face.....	9¾	10	11¾	12¾	14	15¾	18	21	23	26
Diameter of flanges...	6½	7½	8¼	9	10	11	12½	15	17½	20½
Diameter of raised face	3⅝	4⅛	5	5½	6⅜	7⅝	8½	10⅝	12¾	15
Thickness of flanges...	⅞	1	1⅛	1⅜	1½	1⅝	1⅞	2	2¼	2½
Centre to top of hand wheel, open.....	13¼	13⅞	15½	16½	19	21⅞	23⅞	26⅞	28¾	32¼
Diameter of hand wheel	8	8	10	10	12	14	16	20	24	28
Size of by-pass.....					1	1	1¼	1½	1½	2
Centre of main valve to centre of by-pass.....					7¼	8¼	9½	11	12¾	14½
Centre of by-pass to extreme outside.....					1¾	1¾	2⅞	2⅞	2⅞	2½



# JENKINS CAST STEEL VALVES

## ANGLE Extra Heavy Pattern

Outside Screw and Yoke Monel Metal Mounted  
For 300 Pounds Steam Working Pressure or 400 Pounds Oil, Water,  
Gas Working Pressure



Conforming to Canadian Interprovincial Specifications  
Registration Number 01060-123456



Fig. 382  
Angle, Flanged  
Code: ABVHF

These valves are particularly suited for the severe conditions of superheated steam service. The bodies and bonnets are of cast carbon steel. The spindles, seat rings and discs of monel metal. All flanges are supplied with 1/16" raised faces inside of bolt holes; the flanges when ordered drilled, have the bolt holes spot-faced unless requested to furnish otherwise.



Fig. 383  
Angle, Flanged with  
By-Pass  
Code: ABVHK

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Fig. 382.....	Prices on application.....									
Wgt., lbs.....	62	77	110	135	195	270	375	600	940	1300
Fig. 383.....	Prices on application.....									
Wgt., lbs.....					200	275	381	610	952	1320

### Dimensions, Inches

Sizes.....	2	2½	3	3½	4	5	6	8	10	12
Centre to face.....	4 7/8	5 1/8	5 7/8	6 1/2	7	7 3/4	8 3/4	10 1/2	11 1/2	13
Diameter of flanges...	6 1/2	7 1/2	8 1/4	9	10	11	12 1/2	15	17 1/2	20 1/2
Diameter of raised face	3 5/8	4 1/8	5	5 1/2	6 3/16	7 5/16	8 1/2	10 5/8	12 3/4	15
Thickness of flanges...	7/8	1	1 1/8	1 3/16	1 1/4	1 3/8	1 7/16	1 5/8	1 7/8	2
Centre to top of wheel when open.....	12	12 1/16	13 3/4	15 7/16	17	19 3/16	21 5/8	25 5/8	29 3/4	33 1/2
Diameter of hand wheel.....	8	8	10	10	12	14	16	20	24	28
Size of by-pass.....					1	1	1 1/4	1 1/2	1 1/2	2
Centre of main valve to centre of by-pass.....					7 1/4	8 1/4	9 1/2	11	12 3/4	14 1/2
Centre of by-pass to extreme outside.....					1 3/4	1 3/4	2 1/16	2 3/16	2 3/16	2 1/2



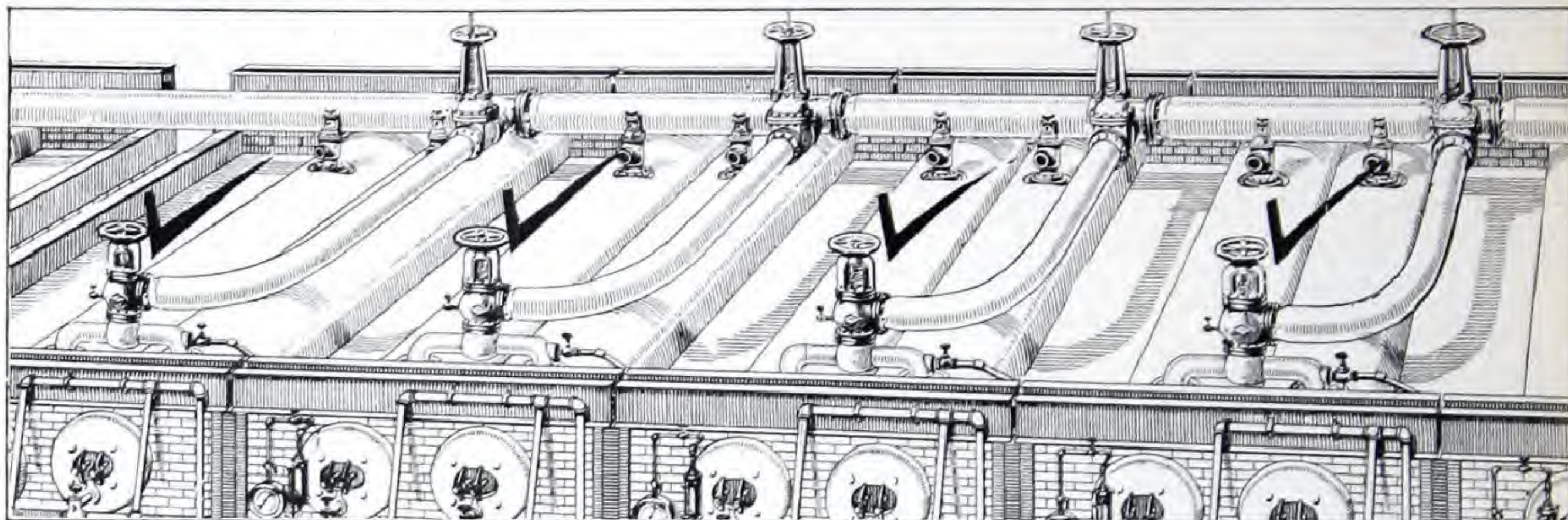
# JENKINS CAST STEEL VALVES

## AUTOMATIC EQUALIZING STOP AND CHECK NON-RETURN

Extra Heavy Pattern      Globe and Angle      Monel Metal Mounted  
Regularly Fitted with Monel Metal Disc for 300 Pounds Steam Working Pressure  
Total Temperature of 800 Degrees F.



Conforming to Canadian Interprovincial Specifications  
Registration Numbers 01063-123456 and 01064-123456



Modern boiler room practice is to use a single-acting non-return and stop valve on each boiler. Jenkins Automatic Equalizing Stop and Check Valves are designed for this service and have proved eminently successful installed on each boiler when the power plant consists of two or more boilers.

Should a tube burst or other rupture suddenly reduce the pressure in a boiler, this valve automatically cuts off the flow of steam from the header to that boiler.

Installed on every boiler, these valves equalize the pressure and cut out the boiler that may be under lower pressure than the others. Furthermore, as the valve can be opened only by the pressure in the boiler on which it is installed, it is impossible to carelessly turn steam into a boiler which is being cleaned. This prevents serious accidents and injury to attendants who may be working in the boiler.



**Fig. 554**  
Globe, Flanged  
Code: ABVZA

The illustration above shows a typical layout of these valves on a battery of boilers.

The body and yoke are made of cast carbon steel, the spindle is monel metal. To prevent chattering, the valve is cushioned by an internal dash pot, made entirely of monel metal, which eliminates the danger of sticking, due to corrosion.

These valves can be furnished of cast iron with bronze seat ring and working parts for pressures up to 250 lbs. as shown on page 133.

*Care should be taken to install the valves with the spindle in a vertical position.*



**Fig. 555**  
Angle, Flanged  
Code: ABVZC

Sizes .....	4	5	6	8
Fig. 554 and Fig. 555 .....	Prices on Application .....			
Fig. 554, Wgt., lbs. ....	199	297	426	560
Fig. 555, Wgt., lbs. ....	194	268	390	535







## HYDRAULIC OR CYLINDER GATE VALVES

Practically all Jenkins Gate Valves, 2" and larger, can be equipped with cylinders for operation by water, steam or air pressure, for controlling the flow of water, steam, air, etc. Cylinder operation is particularly desirable on large valves where the working parts are heavy or where the installation is difficult of access. The cylinder operating pressure is controlled by using a four-way cock, operated either manually or electrically and which may be located more conveniently than the main valve, the pressure can be obtained from boiler feed pump, city water mains, steam line or from an air compressor.

It is preferable to use water for operating and also that the pressure be high so that the cylinders may be small.

Can be supplied with cylinder of bronze, or cast iron bronze-lined to minimize wear. The piston rod is generally constructed so that it extends through the stuffing box, attached to the cylinder head, and fitted with a large eye nut. This serves as an indicator and also affords a means of operation in the event the operating pressure fails.

Inquiries should state the fluid to be controlled, operating pressure available, whether water, air or steam is to be used in the cylinder, maximum operating pressure to which valve may be subjected. Maximum and minimum operating pressure in cylinder and the position in which the valve is to be installed.

Valves are made with either screwed, flanged, hub or victaulic ends.

**Prices on Application**



Low Pressure Gate Valve flanged  
with Cast Iron, Bronze lined Cylinder.  
**Fig. No. 441.** Code: ABVMX

Low Pressure Gate Valve flanged  
with Bronze Cylinder and Stay Bolts.  
**Fig. No. 442.** Code: ABVND

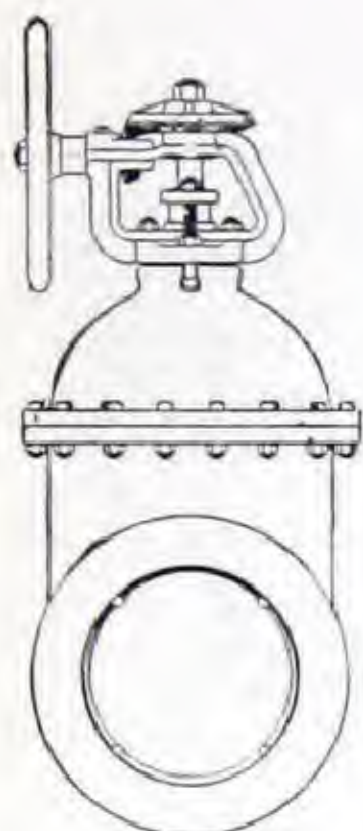
Standard Pressure Gate Valve flanged  
with Cast Iron, Bronze lined Cylinder.  
**Fig. No. 415.** Code: ABVKN

Standard Pressure Gate Valve flanged  
with Bronze Cylinder and Stay Bolts.  
**Fig. No. 416.** Code: ABVKP

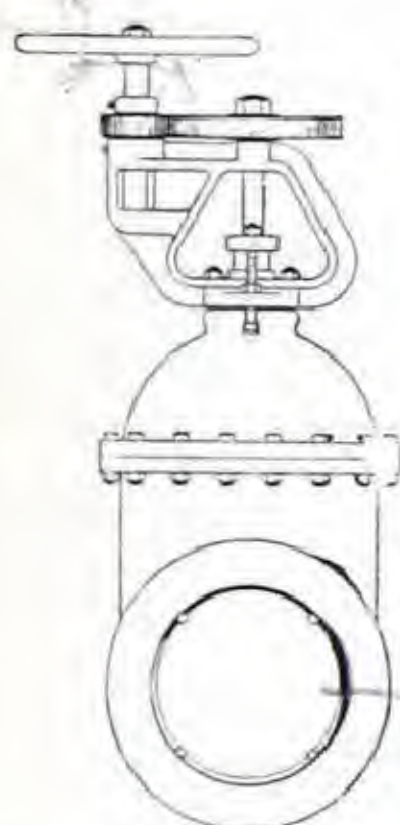


# JENKINS VALVE OPERATING MECHANISMS

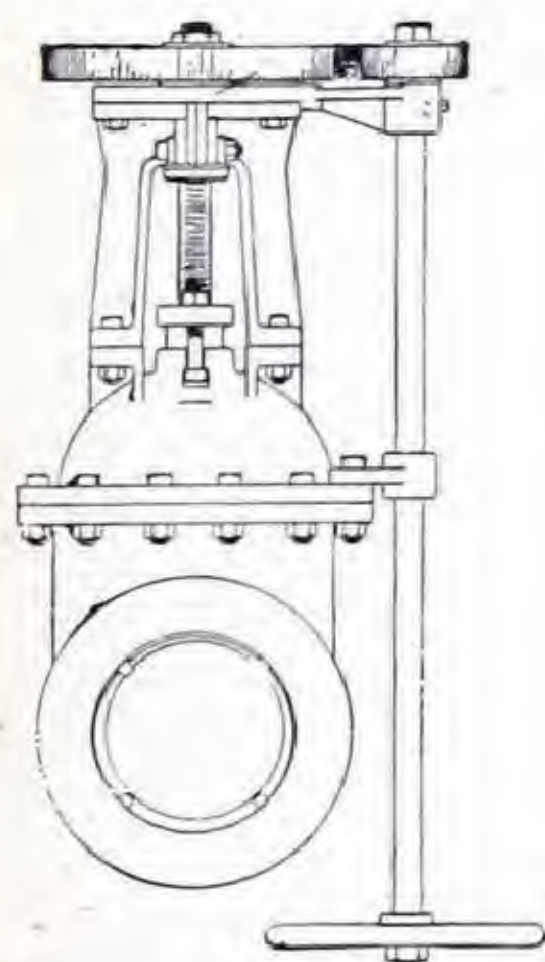
## TYPICAL STYLES OF GEARING For Operating Valves



**Style 1**  
Inside Screw Valve  
Bevel Gearing



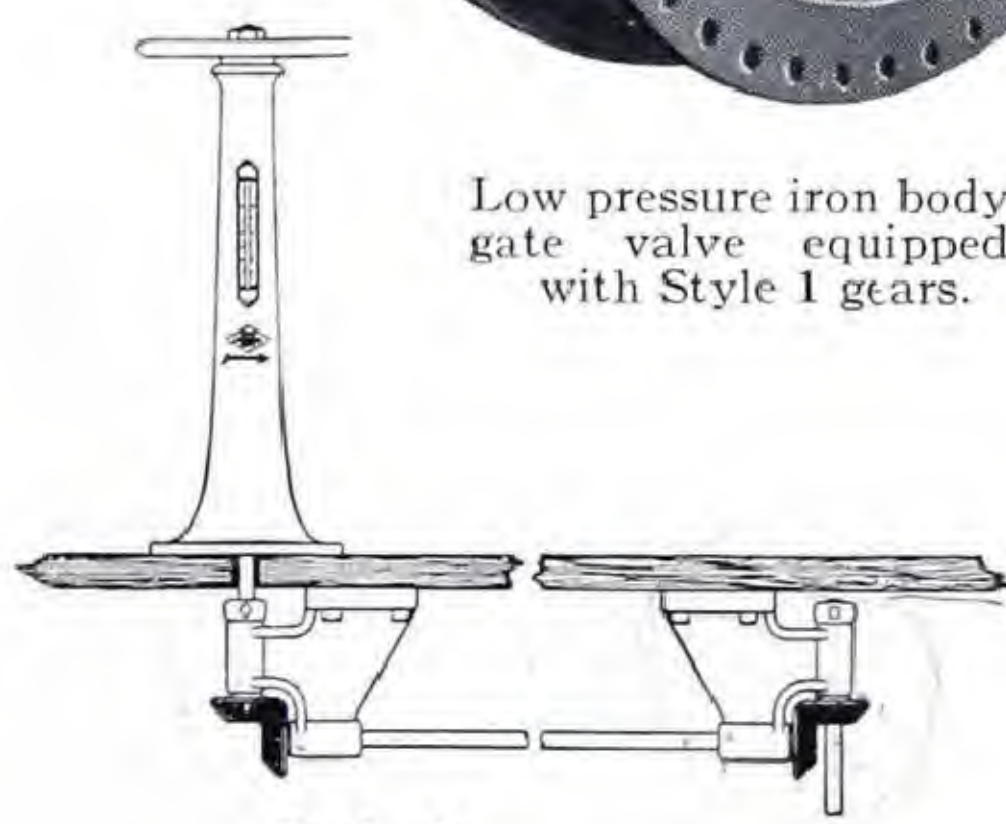
**Style 2**  
Inside Screw Valve  
Spur Gearing



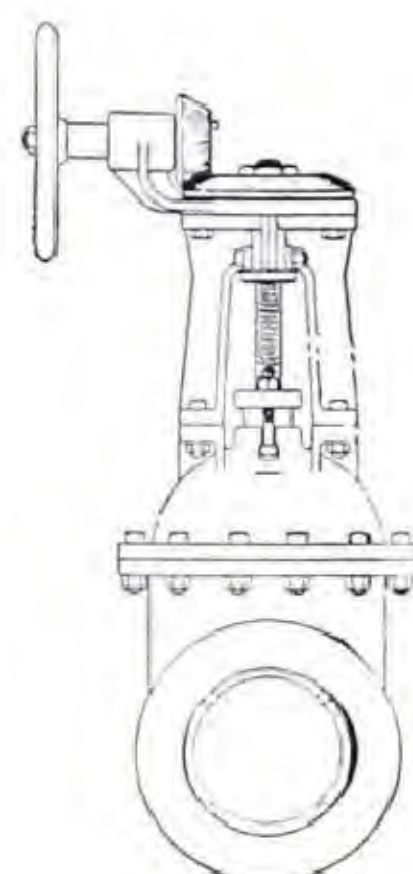
**Style 3**  
O. S. & Y. Valve  
Spur Gearing



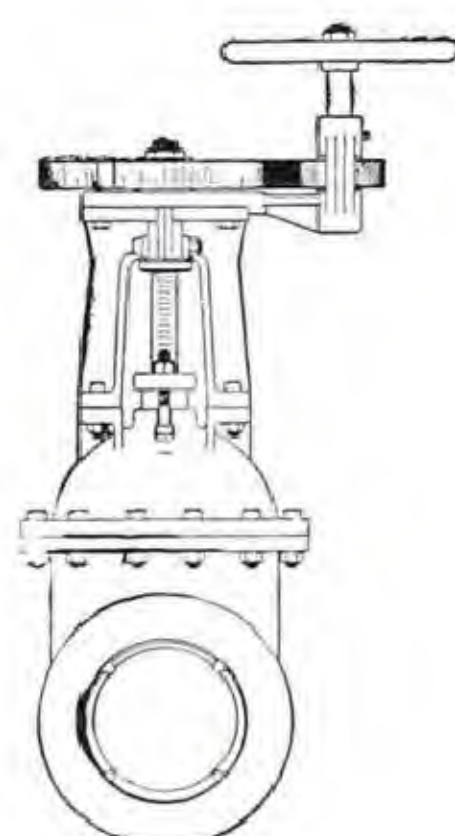
Low pressure iron body  
gate valve equipped  
with Style 1 gears.



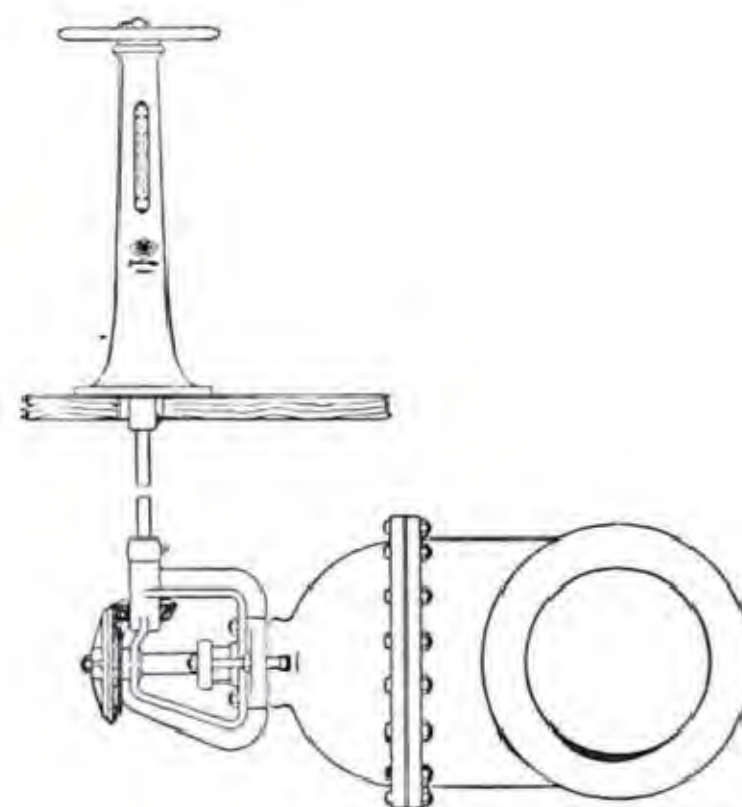
**Style 7**  
Inside Screw Valve  
Mitre Gear Brackets  
and Floor Stand



**Style 4**  
O. S. & Y. Valve  
Bevel Gearing—  
Pinion Shaft  
Parallel to Run  
of Valve



**Style 5**  
O. S. & Y. Valve  
Spur Gearing



**Style 8**  
Inside Screw Valve  
Bevel Gearing, By-Pass  
and Floor Stand

Styles 1, 2, 4 and 8 are designed with adjustable gear brackets. The removal of the bracket bolts allows the bracket to be placed in any of four positions for convenience in operating.

Other types of operating mechanism can be furnished to specification.

When ordering specify type of valve by Figure No. and style of gearing.



## MOTOR OPERATED VALVES

### Globe, Angle, Cross or Gate Types

For Every Class of Service and Pressure

Jenkins Motor Operated Valves are furnished in globe, angle, cross and gate patterns 3" and larger for every class of service and pressure. All valves are equipped with a complete unit consisting of a motor, gear drive, worm reduction gear, opening and closing limit switches and torque switch. It is a reversible, motor driven, reduction gear valve control, with a mechanical power switch mechanism to limit the torque and travel of the valve in both directions. Electric or compressed air power

may be utilized, and the mechanism can be remotely controlled. Where specified, an emergency closing station is provided for remote control, of the same general construction.

In sending inquiries, always state working pressures, the service in which the valve is to be used and the service conditions, also, if motors are for A.C. or D.C., the voltage, phase, and cycles.

### 12 FEATURES IN CONSTRUCTION AND OPERATION OF UNIT

- 1—Operates through one pair of heavy worm gears immersed in oil.
- 2—A geared switch stops the valve disc only when it is properly seated or at a predetermined position. A torque switch protects valve stem and operating parts against breakage, if disc is obstructed by foreign matter.
- 3—Contains no electromagnetic coils, clutching or declutching devices.
- 4—The seating of the valve disc may be adjusted to any degree of tightness.
- 5—All seating strains are absorbed by a powerful compression spring.
- 6—A positive unseating blow is administered at slow speed directly to the stem nut.
- 7—Has an adjustable, positive acting, mechanical power overload.
- 8—The full power of the motor is available for seating and unseating, and throughout full length of travel.
- 9—The motor is of standard, slow speed design, ball bearing type, and totally enclosed.
- 10—The drive between the motor and worm shaft is by helical gears adjustable to vary the speed of operation to suit all conditions.
- 11—The machine is applied to the valve yoke, without any outside driving gears or covers.
- 12—The machine can be applied to globe, angle, cross and gate valves, also to floor stands for operating valves located below floors or ground level.

### FURNISHED AS REGULAR EQUIPMENT:

**Motor**—Unless otherwise specified, the motor furnished is for direct current at 115 volts or 230 volts, heavily compounded for valve duty. For alternating current, polyphase circuits, the motors are wound for 220, 440 and 550 volts, 60 cycles. The latter motors are of the high torque induction type, fully enclosed with gasketed covers.

**Reversing Contactor Panel**—Each machine is provided with a reversing contactor panel consisting of two contactors with a mechanical interlock, mounted in sheet iron, dust and water-tight case with conduit connections.

**Control Station**—The control station consists of a cast aluminum box and cover, which

contains three double pole push buttons of heavy duty type. The positions are "Open," "Closed," and "Stop." The buttons are covered by a cast aluminum cover with glass front.

**Indicating Lights**—One red and one green indicating light is included, and the light operation is as follows:

Valve open —Red light glows  
Valve moving—Red and green lights glow  
Valve closed —Green light glows

**Handwheel**—For use in case of emergency, a separate cast iron handwheel is provided with each valve for attachment to the worm shaft, and drives the stem nut through a reduction of 30-1 or 40-1.



# JENKINS VALVE OPERATING MECHANISMS

## MOTOR OPERATED VALVES Globe, Angle, Cross or Gate Types For Every Service and Pressure



A 36" **Fig. 404.** Jenkins Standard Iron Body Gate Valve with outside screw and yoke. Valve is equipped with unit for motor operation.



Control Station  
Design permits valve  
operation from any point

This shows the method of attachment of the remote control to Jenkins outside screw and yoke gate valves.

A flange is cast on top of the valve yoke to which the machine is bolted and through which the rising valve spindle passes.

The handwheel is attached to a shaft inside the enclosing cap. During power operation the entire machine is totally enclosed and only the valve spindle in the yoke proper is visible.



FLOOR STAND

Without Indicator Attachment

For Outside Screw and Yoke or Non-Rising Spindle Valves



View showing Floor Stand with extension spindle attached to valve with non-rising spindle.

When ordering Floor Stands for valves other than those of Jenkins manufacture it is necessary to specify size and style of valve; manufacturer's name and figure number of valve; whether valve opens to the left or right; the number of turns to fully open; diameter of valve spindle; outside diameter of hand wheel.

If extension spindles and couplings are required, it is necessary to give the following information:

- | For Non-Rising Spindle Valves   | For Outside Screw and Yoke Valves                    |
|---|--|
| 1. Distance from centre of pipe line to floor level.                  | 1. Distance from centre of pipe line to floor level. |
| 2. Dimensions of hand wheel square on spindle top.                    | 2. Details of yoke nut and wheel construction.       |
| 3. Centre of pipe line to bottom of hand wheel square on spindle top. | 3. Centre of pipe line to bottom of hand wheel hub.  |

When required for valves of Jenkins manufacture it is only necessary to give: Distance from centre of pipe line to floor level.

**Fig. 390**  
Painted column and japanned wheel  
Code: ABVIN

**Fig. 392**  
Finished column and japanned wheel  
Code: ABVIR

**Fig. 394**  
Finished column, rim and hub of wheel finished and spokes japanned  
Code: ABVIV

Size (Lower face of floor flange to wheel).....	32
Fig. 390 (Price does not include extension spindle).....	Prices on application
Fig. 392 (Price does not include extension spindle).....	Prices on application
Fig. 394 (Price does not include extension spindle).....	Prices on application
Wgt., lbs. (Figs. 390, 392, 394).....	95

Dimensions, Inches

Size (Lower face of floor flange to wheel).....	32
Diameter of bolt holes.....	9/16
Diameter of bolt circle.....	12 1/4
Diameter of floor flange.....	13 1/2
Number of floor flange bolt holes.....	4



FLOOR STAND  
With Indicator Attachment

For Outside Screw and Yoke or Non-Rising Spindle Valves

When ordering Floor Stands for valves other than those of Jenkins manufacture it is necessary to specify size and style of valve; manufacturer's name and figure number of valve; whether valve opens to the left or right; the number of turns to fully open; diameter of valve spindle; outside diameter of hand wheel.

If extension spindles and couplings are required, it is necessary to give the following information:

- For Non-Rising Spindle Valves**

  - 1. Distance from centre of pipe line to floor level.
  - 2. Dimensions of hand wheel square spindle top.
  - 3. Centre of pipe line to bottom of hand wheel square on spindle top.
- For Outside Screw and Yoke Valves**

  - 1. Distance from centre of pipe line to floor level.
  - 2. Details of yoke nut and wheel construction.
  - 3. Centre of pipe line to bottom of hand wheel hub.

When required for valves of Jenkins manufacture it is only necessary to give: Distance from centre line of pipe to floor level.

**Fig. 391**  
Painted column and japanned wheel.  
Code: ABVIO

**Fig. 393**  
Finished column and japanned wheel.  
Code: ABVIT

**Fig. 395**  
Finished column, rim and hub of wheel finished and spokes japanned.  
Code: ABVIX



View showing Floor Stand with extension spindle attached to valves with rising spindle.

Size (Lower face of floor flange to wheel) . . . . .	32
Fig. 391 (Price does not include extension spindle) . . . . .	Prices on application
Fig. 393 (Price does not include extension spindle) . . . . .	Prices on application
Fig. 395 (Price does not include extension spindle) . . . . .	Prices on application
Wgt., lbs. (Fig. 391, 393, 395) . . . . .	95

Dimensions, Inches

Size (Lower face of floor flange to wheel) . . . . .	32
Diameter of bolt holes . . . . .	9/16
Diameter of bolt circle . . . . .	12 1/4
Diameter of floor flange . . . . .	13 1/2
Number of floor flange bolt holes . . . . .	4



## INDICATOR POST

### Underwriters' Pattern For Buries of any Depth

Identification Marks F.M. and J.B.U.

When Indicator Posts are required for other than Jenkins Valves, the following information is necessary:

- A—Depth of trench, or bury of post.
- B—Centre of valve to top of stuffing-box flange.
- C—Outside diameter of stuffing box.
- D—Centre of valve to bottom of square on operating nut.
- E—Size and length of square on operating nut.
- F—Bolt circle, size and number of bolts in stuffing-box.
- G—Number of turns to open and whether valve opens by turning to the right or left.

When required for Jenkins Valves, it is only necessary to give dimension "A".

Jenkins Underwriters' Pattern Indicator Posts are approved by the National Board of Fire Underwriters and Associated Factory Mutual Fire Insurance Companies. They are designed for use with iron body water valves connected to fire service mains. By means of an indicator, showing through the plate glass windows on both sides of the post, it can be ascertained immediately whether the underground valve is "open" or "closed."

Jenkins Indicator Posts when so required can be furnished with a locking device which also serves as an operating wrench.

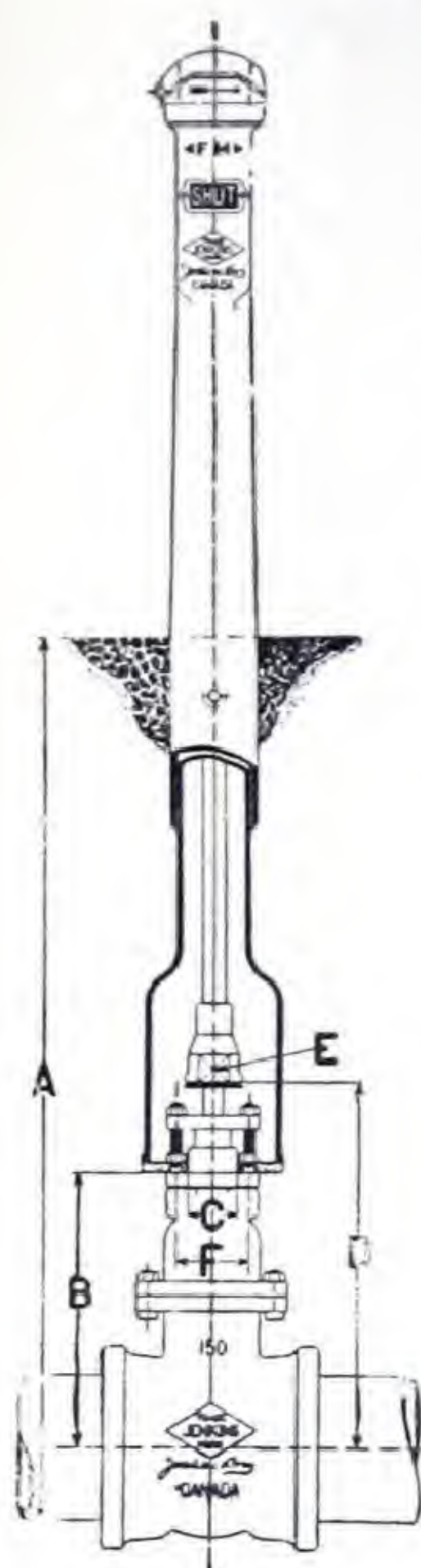


Fig. 414  
Code: ABVKL

Prices on Application

## Extension Valve Boxes

The boxes are strong to withstand heavy traffic. The cover will not be thrown out by anything passing over it and yet it can be easily removed.

The letter "W" is cast on the cover, but when specified the letter "G" or other markings can be supplied.

When ordering give size of valve, also depth of trench.

Prices on Application.

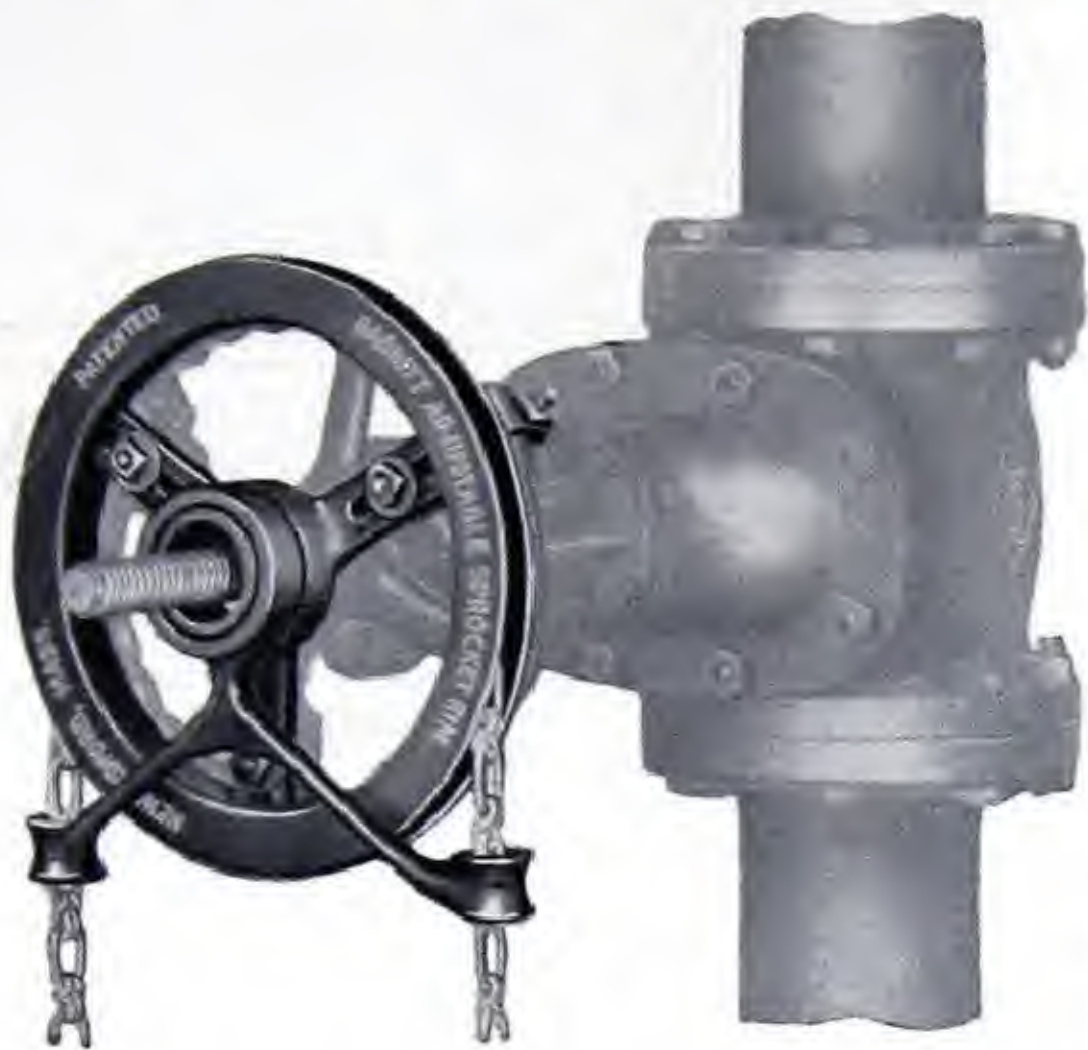


Fig. 345  
Indicator Post  
Code: ABVBY



BABBITT ADJUSTABLE SPROCKET RIM  
With Chain Guide

For use on any Type of Valve



**Fig. 659**  
Babbitt Adjustable Sprocket  
Rim with Chain Guide  
Code: ABWIH

The illustration shows Fig. 659 attached to the wheel of a Jenkins Iron Body Gate Valve with outside screw and yoke. Operating chain is shown in position.

Designed to operate valves installed in inaccessible places. While standing on the floor the operator can open and close the valve without the slightest inconvenience. Will fit the wheel of any valve and can be attached in a few minutes. Only tool needed is a monkey wrench.

To attach the rim and guide, adjust the hook bolts to the rim of the wheel, pass them through the slots in the lugs, centre the sprocket rim on the wheel and then tighten up the nuts. Never attach to the spokes.

When ordering, give the diameter of the valve wheel to be fitted and number of feet of chain required.

We do not recommend the use of chain wheels on bronze valves, unless the valves are fitted with a special extended waste nut to give support to the spindle.

Size No.	Diameter of Sprocket Wheel, Inches	Diameter of Valve Wheels Rim Will Fit in Inches	List Price of Rim and Guide Combined	Rustproof Chain per Foot	Sprocket Wheel and Guide, Net Weight in Pounds	Table of Chain Measurements, see also Foot-note
0.....	4	2 to 3½	2.40	.10½	2½	6"
1.....	5½	3½ to 5	4.00	.14	4	9
1½.....	7	5½ to 6½	5.20	.14	5	1'-0"
2.....	9	7 to 8½	6.40	.14	8	1'-6"
2½.....	12	8 to 11½	8.80	.22	13	2'-0"
3.....	15	11 to 14½	10.80	.22	17	2'-6"
3½.....	19	15 to 18½	15.20	.22	24	3'-0"
4.....	22	19 to 21½	20.00	.37	31	3'-6"
4½.....	26	22 to 25½	28.00	.37	38	4'-0"
5.....	30	26 to 30	32.00	.37	45	5'-0"

List price includes necessary Hook Bolts to attach Rim to Wheel of Valve. When ordering, give the diameter of the Valve Wheel to be fitted and number of feet of chain required.

**Table of Chain Measurements:** To ascertain number of feet of chain required to operate Rim, measure from centre of Valve Wheel the drop required; double that amount and add for each Rim size according to Number of Rim, the amount in feet and inches given in table above. These amounts allow for loss in circles at top of wheel and bottom of loop.



## SEAT REFACING TOOLS

### For Use On Jenkins Bronze and Iron Body Valves

These Wright and Rust Valve Files are made in three patterns. Fig. 256, which is a combination set for refacing Jenkins Bronze Valves, both screw-over and screw-in bonnets. Fig. 257 is designed for refacing Jenkins Bronze Valves with screw-over bonnets only. Fig. 205-A illustrated on the opposite page is made for refacing the seats of Jenkins Iron Body Valves.

The spindle holding the cutters has a square end and can be readily used with ordinary bit stock or with a hand wheel taken from one of the valves. The circular files, or cutters, one for each size valve, are made of the best file steel, carefully cut and hardened. They are reversible, having a cutting face on both sides.

#### Fig. 256 Pattern

This pattern is designed for use on Jenkins valves either with screw-over bonnet or screw-in bonnet. The bushings, one for each size valve  $\frac{3}{8}$ " to 3" inclusive, are so designed that one end screws into the body of Jenkins Fig.

106, 108 and 110 Globe, Angle and Cross Valves; the other end screws over the body of Jenkins Fig. 106-A, 108-A and 110-A Globe, Angle and Cross Valves.

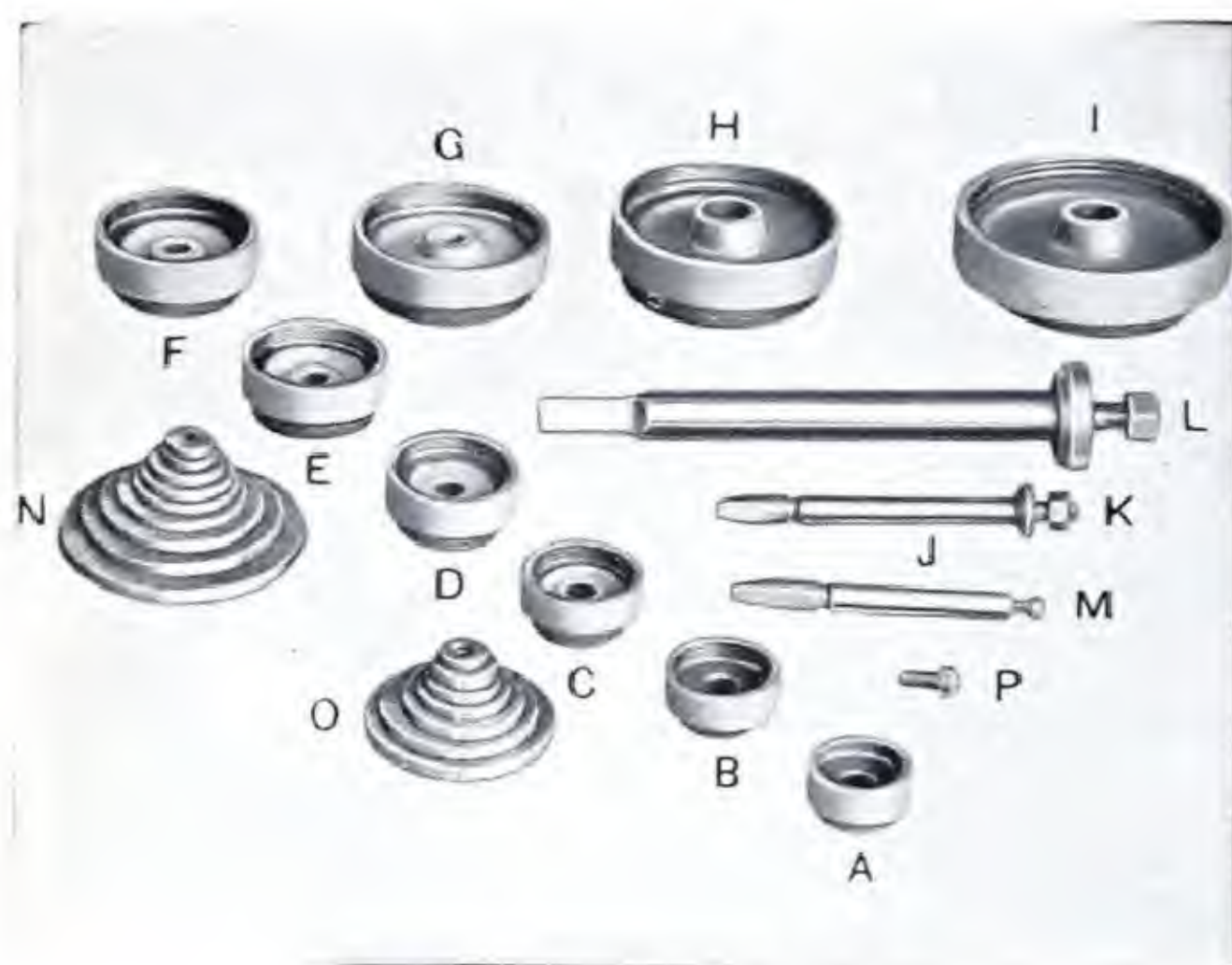


Fig. 256 Code: ABUPI

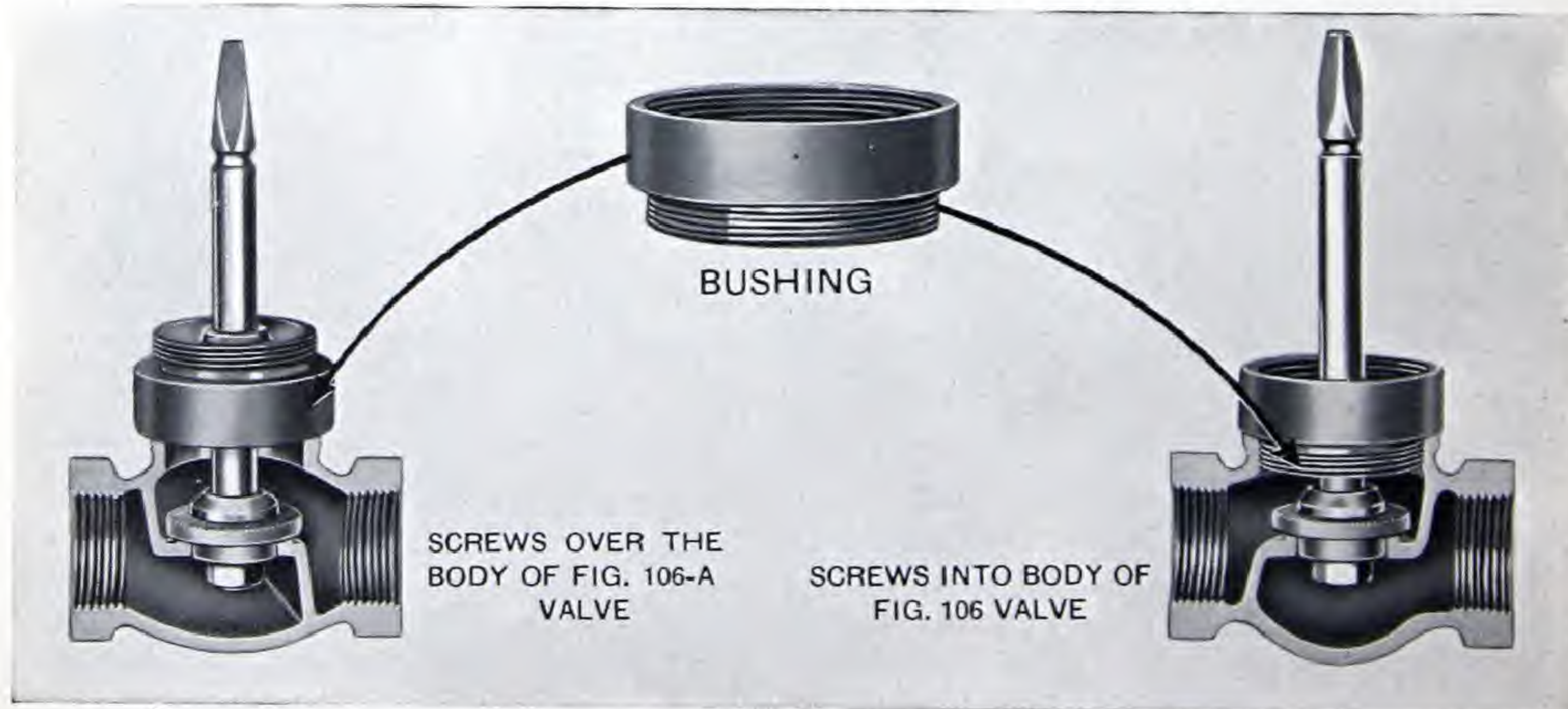
#### Schedule of Parts

Key	Name of Part	For Valve Sizes	Contained in Sets
A	Bushing.....	$\frac{3}{8}$ "	Nos. 1, 3 and 4
B	Bushing.....	$\frac{1}{2}$ "	Nos. 1, 3 and 4
C	Bushing.....	$\frac{3}{4}$ "	Nos. 1, 2, 3 and 4
D	Bushing.....	1"	Nos. 1, 2, 3 and 4
E	Bushing.....	$1\frac{1}{4}$ "	Nos. 2, 3 and 4
F	Bushing.....	$1\frac{1}{2}$ "	Nos. 2, 3 and 4
G	Bushing.....	2"	Nos. 2, 3 and 4
H	Bushing.....	$2\frac{1}{2}$ "	No. 4 only
I	Bushing.....	3"	No. 4 only
J	Spindle.....	$\frac{3}{8}$ " and $\frac{1}{2}$ "	Nos. 1, 3 and 4
K	Spindle.....	$\frac{3}{4}$ ", 1", $1\frac{1}{4}$ ", $1\frac{1}{2}$ " and 2"	Nos. 1, 2, 3 and 4
L	Spindle.....	$2\frac{1}{2}$ " and 3"	No. 4 only
M	Spindle Screw.....	$\frac{1}{2}$ " only	Nos. 1, 3 and 4
N	File or Cutter.....	Separate cutter for each size	Nos. 1, 2, 3 and 4
O	Guide Bushing.....	Separate bushing for each size	Nos. 1, 2, 3 and 4
P	Spindle Screw.....	$\frac{3}{8}$ " only	Nos. 1, 3 and 4

#### List Price of Fig. 256

Set No.	For Valve Sizes	Complete Set	Set No.	For Valve Sizes	Complete Set
1	Sizes $\frac{3}{8}$ to 1 inch, inclusive, 4 sizes..	\$18.00	3	Sizes $\frac{3}{8}$ to 2 inch, inclusive, 7 sizes..	\$30.00
2	Sizes $\frac{3}{4}$ to 2 inch, inclusive, 5 sizes..	23.00	4	Sizes $\frac{3}{8}$ to 3 inch, inclusive, 9 sizes..	40.00

#### Application of Fig. 256 on both Figs. 106-A and 106 Valves





SEAT REFACING TOOLS  
For Use On Jenkins Bronze and Iron Body Valves

Fig. 257 Pattern

This pattern is designed for use on Jenkins bronze valves. Fig. 106-A, 108-A and 110-A only.  
The bushings, one for each size valve  $\frac{3}{8}$ " to 3" inclusive, are so designed that they screw over the body.

Schedule of Parts

Key	Name of Part	For Valve Sizes	Contained in Sets
A	Bushing	$\frac{3}{8}$ "	Nos. 1, 3 and 4
B	Bushing	$\frac{1}{2}$ "	Nos. 1, 3 and 4
C	Bushing	$\frac{3}{4}$ "	Nos. 1, 2, 3 and 4
D	Bushing	1"	Nos. 1, 2, 3 and 4
E	Bushing	$1\frac{1}{4}$ "	Nos. 2, 3 and 4
F	Bushing	$1\frac{1}{2}$ "	Nos. 2, 3 and 4
G	Bushing	2"	Nos. 2, 3 and 4
H	Bushing	$2\frac{1}{2}$ "	No. 4 only
I	Bushing	3"	No. 4 only
J	Spindle	$\frac{3}{8}$ " and $\frac{1}{2}$ "	Nos. 1, 3 and 4
K	Spindle	$\frac{3}{4}$ ", 1", $1\frac{1}{4}$ ", $1\frac{1}{2}$ " and 2"	Nos. 1, 2, 3 and 4
L	Spindle	$2\frac{1}{2}$ " and 3"	No. 4 only
M	Spindle Screw	$\frac{1}{2}$ " only	Nos. 1, 3 and 4
N	File or Cutter	Separate cutter for each size	Nos. 1, 2, 3 and 4
O	Guide Bushing	Separate bushing for each size	Nos. 1, 2, 3 and 4
P	Spindle Screw	$\frac{3}{8}$ " only	Nos. 1, 3, and 4



Fig. 257  
Code: ABUPC

List Price of Fig. 257

Set No.	For Valve Sizes	Complete Set	Set No.	For Valve Sizes	Complete Set
1	Sizes $\frac{3}{8}$ to 1 inch, inclusive, 4 sizes	\$18.00	3	Sizes $\frac{3}{8}$ to 2 inch, inclusive, 7 sizes	\$30.00
2	Sizes $\frac{3}{4}$ to 2 inch, inclusive, 5 sizes	23.00	4	Sizes $\frac{3}{8}$ to 3 inch, inclusive, 9 sizes	40.00

Fig. 205-A Pattern

The illustration shows the Wright & Rust Valve File as made for refacing the seats of Jenkins Iron Body Globe, Angle and Cross Valves. This tool is operated by means of a circular hand wheel.  
The spindles of all sets are made of machinery steel, the bushings of cast iron, and the guides of brass. The files or cutters, one for each size valve, are made of the best file steel, carefully cut and hardened. Files are supplied for bevel seats as well as flat seats.  
The cost of the entire outfit is very moderate, and will sometimes pay for itself on a single repair job.



Fig. 205-A  
Code: ABUIR

Set. No.	For Valve Sizes	Complete Set
5	2 to 6 inch, inclusive, eight sizes	\$115.00



# IRON BODY VALVE FLANGES

## COMPANION FLANGES

Cast Iron

Standard Pattern



Fig. 682  
Companion Flange  
Code: ABWKE

### List Prices of Standard Cast Iron Companion Flanges and List Prices of Drilling Jenkins Standard Iron Body Valve Flanges

Sizes	2	2½	3	3½	4	5	6	8
A	.75	.85	.95	1.20	1.35	1.60	2.00	3.10
B	1.00	1.10	1.25	1.55	1.80	2.05	2.50	3.80
C	.75	.75	.75	1.00	1.25	1.50	1.75	2.25
D	1.25	1.25	1.25	1.50	1.75	2.00	2.50	3.00
E	.35	.35	.35	.70	.75	.95	.95	1.00
F	.40	.40	.40	.40	.40	.60	.60	.60
G	1.50	1.50	1.50	2.00	2.50	3.00	3.50	4.50

Sizes	10	12	14	16	18	20	24
A	4.50	6.50	9.00	13.50	16.00	19.00	27.00
B	5.50	7.65	10.35	15.30	18.00	21.50	30.50
C	2.50	3.50	4.00	5.00	6.00	7.50	10.00
D	3.50	5.00	6.00	7.00	.....	.....	.....
E	2.25	2.25	3.20	4.45	6.85	8.75	11.00
F	.80	.80	.80	1.00	1.00	1.00	1.00
G	5.00	7.00	.....	.....	.....	.....	.....

A-Standard cast iron companion flanges, faced. B-Standard cast iron companion flanges faced and drilled. C-Drilling flanges of standard iron body valves with two flanges (except angle valves). D-Drilling flanges of standard iron body angle valves. E-Bolts and nuts per set for each joint. F-Labor bolting on two flanges. G-Drilling flanges of standard iron body cross valves (three flanges).

### Standard Flange Dimensions (Inches) American Standard

Sizes	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12
A	4¼	4⅝	5	6	7	7½	8½	9	10	11	13½	16	19
B	7/16	1/2	9/16	5/8	11/16	3/4	13/16	15/16	15/16	1	11/8	13/16	11¼
D	31/8	3½	37/8	4¾	5½	6	7	7½	8½	9½	11¾	14½	17
E	4	4	4	4	4	4	8	8	8	8	8	12	12
F	5/8	5/8	5/8	¾	¾	¾	¾	¾	7/8	7/8	7/8	1	1
G	1x1½	1x1½	1x1¾	5/8x2	5/8x2¼	5/8x2¼	5/8x2½	5/8x2¾	¾x2¾	¾x3	¾x3¼	7/8x3½	7/8x3½

Sizes	14	16	18	20	24	30	36	42	48	54	60	72	84
A	21	23½	25	27½	32	38¾	46	53	59½	66¼	73	86½	99¾
B	13/8	17/16	19/16	111/16	17/8	21/8	23/8	25/8	23/4	3	31/8	3½	37/8
D	18¾	21¼	22¾	25	29½	36	42¾	49½	56	62¾	69¼	82½	95½
E	12	16	16	20	20	28	32	36	44	44	52	60	64
F	11/8	11/8	1¼	1¼	13/8	13/8	15/8	15/8	15/8	2	2	2	2¼
G	1x4	1x4¼	1x4½	1x4¾	1¼x5¼	1¼x5¾	1½x6½	1½x7¼	1½x7½	1¾x8¼	1¾x8½	1¾x9½	2x10½

A-Diameter of flange. B-Thickness of flange. D-Diameter of bolt circle. E-Number of bolt holes. F-Size of bolt holes. G-Size of bolts.



IRON BODY VALVE FLANGES

COMPANION FLANGES

Cast Iron

Extra Heavy Pattern



Fig. 683  
Flange, Hub  
Code: ABWKG



Fig. 683  
Flange, Raised Face  
Code: ABWKG

List Prices of Extra Heavy Cast Iron Companion  
Flanges and List Prices of Drilling Jenkins  
Extra Heavy Iron Body Valve Flanges

Sizes	1	1¼	1½	2	2½	3	3½	4	5	6
A	.95	1.00	1.10	1.25	1.40	1.60	2.00	2.25	2.65	3.30
B	1.30	1.35	1.45	1.60	1.75	2.05	2.55	2.95	3.35	4.05
C	.60	.60	.60	.75	.75	.75	1.00	1.25	1.50	1.75
D	1.00	1.00	1.00	1.25	1.25	1.25	1.50	1.75	2.00	2.50
E			.50	.70	.95	1.00	1.00	1.00	1.05	1.55
F			.40	.40	.40	.40	.40	.40	.60	.60

Sizes	8	10	12	14	16	18	20	24
A	5.10	7.40	10.75	15.00	22.25	26.00	31.00	45.00
B	6.15	8.90	12.50	17.00	25.00	29.00	35.00	50.00
C	2.25	2.50	3.50	4.00	5.00	6.00	7.50	10.00
D	3.00	3.50	5.00					
E	2.45	4.55	7.15	9.15	11.30	13.85	13.85	23.50
F	.60	.80	.80	.80	1.00	1.00	1.00	1.00

A-Extra Heavy cast iron companion flanges, faced. B-Extra Heavy cast iron companion flanges faced and drilled. C-Drilling flanges of Extra Heavy iron body valves with two flanges (except angle valves). D-Drilling flanges of Extra Heavy iron body angle valves. E-Bolts and nuts per set for each joint. F-Labor bolting on two flanges.

Extra Heavy Flange Dimensions (Inches)  
American Standard

Sizes	1	1¼	1½	2	2½	3	3½	4	5	6	8
A	4⅞	5¼	6⅛	6½	7½	8¼	9	10	11	12½	15
B	11/16	3/4	13/16	7/8	1	1⅛	1⅜	1¼	1⅜	17/16	1⅝
C	211/16	31/16	39/16	43/16	415/16	511/16	65/16	615/16	85/16	911/16	1115/16
D	4	4	4	8	8	8	8	8	8	12	12
E	3½	37/8	4½	5	57/8	65/8	7¼	77/8	9¼	105/8	13
F	3/4	3/4	7/8	3/4	7/8	7/8	7/8	7/8	7/8	7/8	1
G	5/8x2¼	5/8x2½	3/4x2½	5/8x2½	3/4x3	3/4x3¼	3/4x3¼	3/4x3½	3/4x3¾	3/4x3¾	7/8x4¼

Sizes	10	12	14	16	18	20	24	30	36	42	48
A	17½	20½	23	25½	28	30½	36	43	50	57	65
B	17/8	2	2⅛	2¼	2⅜	2½	2¾	3	3⅜	311/16	4
C	141/16	167/16	1815/16	211/16	235/16	259/16	305/16	373/16	4311/16	507/16	587/16
D	16	16	20	20	24	24	24	28	32	36	40
E	15¼	17¾	20¼	22½	24¾	27	32	39¼	46	52¾	60¾
F	1⅛	1¼	1¼	1⅜	1⅜	1⅜	1⅝	2	2¼	2¼	2¼
G	1x5	1⅛x5½	1⅛x5¾	1¼x6	1¼x6¼	1¼x6½	1½x7½	1¾x8¼	2x9¼	2x9¾	2x10½

A-Diameter of flange. B-Thickness of flange. C-Diameter of raised face. D-Number of bolt holes. E-Diameter of bolt circle. F-Size of bolt holes. G-Size of bolts.



# BRONZE VALVE FLANGES

## List Prices of Drilling Flanges of Jenkins Bronze Valves

### Standard Pattern

Sizes.....	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	5	6
A.....	.60	.60	.60	.75	.75	.75	1.00	1.25	1.50	1.75
B.....	1.00	1.00	1.00	1.25	1.25	1.25	1.50	1.75	2.00	2.50
C.....				1.50	1.50	1.50	2.00	2.50	3.00	3.50

A-Drilling flanges of standard bronze valves with two flanges (except angle valves). B-Drilling flanges standard bronze angle valves. C-Drilling flanges of standard bronze cross valves (three flanges).

### Standard Bronze Flange Dimensions (Inches)

#### American Standard

Sizes.....	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	5	6
A.....	4 $\frac{1}{4}$	4 $\frac{5}{8}$	5	6	7	7 $\frac{1}{2}$	8 $\frac{1}{2}$	9	10	11
B.....	$\frac{3}{8}$	$\frac{13}{32}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{11}{16}$	$\frac{3}{4}$	$\frac{13}{16}$
C.....	3 $\frac{1}{8}$	3 $\frac{1}{2}$	3 $\frac{7}{8}$	4 $\frac{3}{4}$	5 $\frac{1}{2}$	6	7	7 $\frac{1}{2}$	8 $\frac{1}{2}$	9 $\frac{1}{2}$
E.....	4	4	4	4	4	4	8	8	8	8
F.....	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$
G.....	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$

A-Diameter of flange, minimum. B-Thickness of flange. C-Diameter of bolt circle. E-Number of bolt holes. F-Size of bolt holes. G-Size of bolts.

### Extra Heavy Pattern

Sizes.....	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	5	6
A.....	.60	.60	.60	.75	.75	.75	1.00	1.25	1.50	1.75
B.....	1.00	1.00	1.00	1.25	1.25	1.25	1.50	1.75	2.00	2.50

A-Drilling flanges of extra heavy bronze valves with two flanges (except angle valves). B-Drilling flanges of extra heavy bronze angle valves.

### Extra Heavy Bronze Valve Dimensions (Inches)

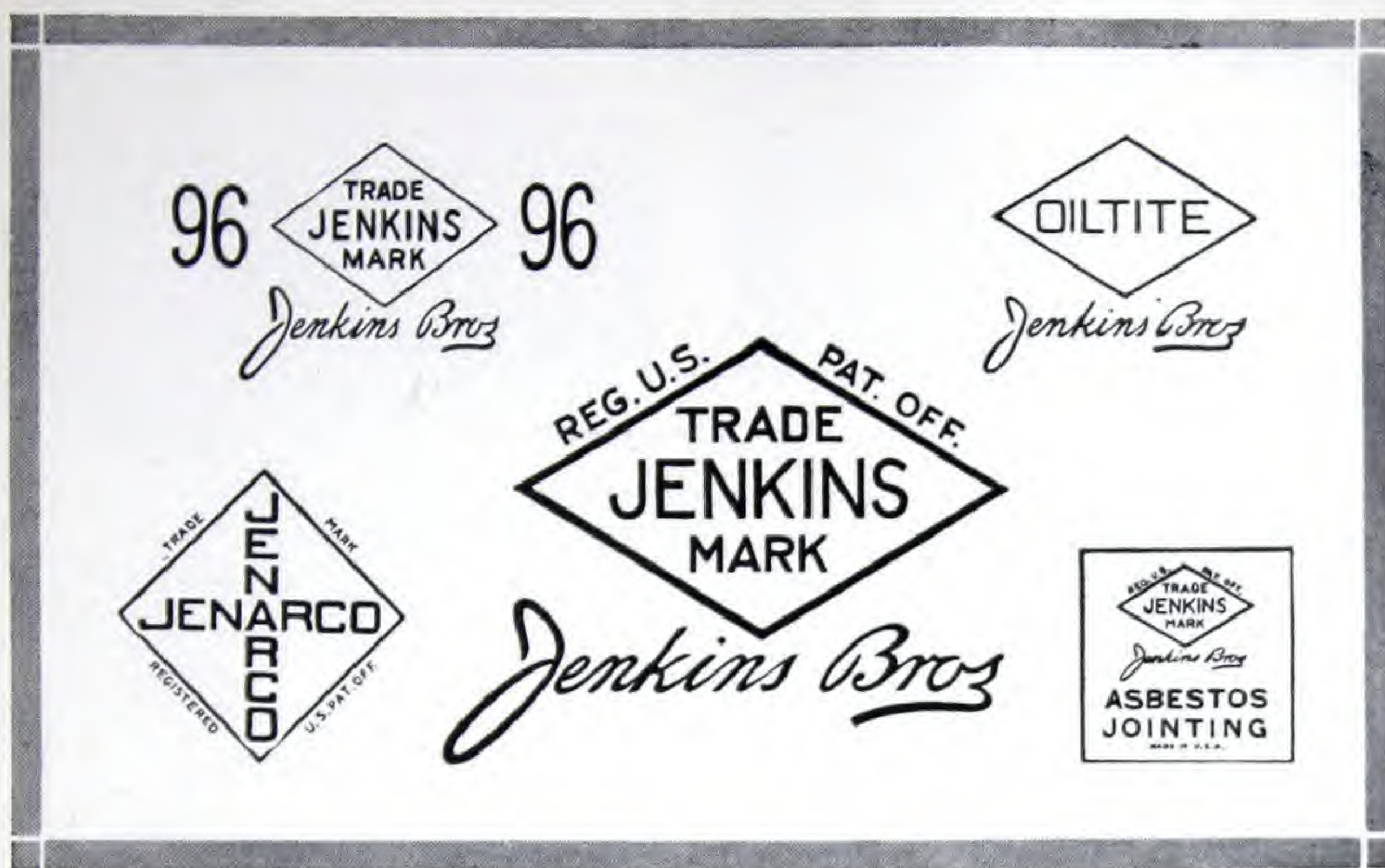
#### American Standard

Sizes.....	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	5	6
A.....	4 $\frac{7}{8}$	5 $\frac{1}{4}$	6 $\frac{1}{8}$	6 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{4}$	9	10	11	12 $\frac{1}{2}$
B.....	$\frac{1}{2}$	$\frac{17}{32}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$	$\frac{13}{16}$	$\frac{7}{8}$	$\frac{15}{16}$	1
C.....	3 $\frac{1}{2}$	3 $\frac{7}{8}$	4 $\frac{1}{2}$	5	5 $\frac{7}{8}$	6 $\frac{5}{8}$	7 $\frac{1}{4}$	7 $\frac{7}{8}$	9 $\frac{1}{4}$	10 $\frac{5}{8}$
E.....	4	4	4	8	8	8	8	8	8	12
F.....	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$
G.....	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$

A-Diameter of flange, minimum. B-Thickness of flange. C-Diameter of bolt circle. E-Number of bolt holes. F-Size of bolt holes. G-Size of bolts.



# JENKINS MECHANICAL RUBBER GOODS



## Jenkins Rubber Goods—Since 1864

FOR many years, dating from 1864 when Nathaniel Jenkins invented the Renewable Disc valve, Jenkins Bros. has manufactured rubber products for engineering, plumbing, heating, and general industrial use. These products include composition valve discs, pump valves, sheet packings, gaskets, gasket tubing, union rings, Fuller balls and washers for special purposes; also molded and extruded rubber goods to meet individual specifications.

Jenkins Rubber Goods are superior products. Each is composed of carefully selected ingredients scientifically compounded according to service-proven formulas. Made by experts who have a thorough knowledge of the requirements of various service conditions and what a sheet packing, gasket, disc, or any similar products

must be composed of in order to accomplish satisfactory service, Jenkins Rubber Goods bring to every job assurance of reliable performance when used in the service for which they are intended.

Jenkins Bros. operates a plant in Bridgeport, Connecticut, equipped with a modern rubber laboratory and scientifically controlled machinery, permitting the most economical production of uniformly high-grade goods to meet the most exacting specifications and requirements.

Above are the registered trade-marks that appear on the various products included in the line of Jenkins Mechanical Rubber Goods. Each of these symbols means your protection, for it indicates and identifies the product as being one manufactured by Jenkins Bros.



## RENEWABLE COMPOSITION VALVE DISCS

Jenkins Renewable Composition Discs are compounded from the highest grade of ingredients. Modern methods of manufacture, automatically controlled machinery and a staff of experienced engineers and chemists assure uniform production. The various compounds, each best suited for a particular kind of service, are described below. When used in service specified, Jenkins Discs are unconditionally guaranteed. The Jenkins Disc in service presents a slightly yielding surface to the valve seat and is resilient enough to adapt itself to the seat, assuring perfect contact.



### Schedule of Principal Compounds and Service for which Jenkins Composition Discs are Recommended

**No. 30.** A disc for cold water, air and gas up to 10 pounds pressure. For extremely low pressures in Check Valves on vacuum lines, this disc will be tight on a fraction of an ounce.

**No. 15.** A disc for cold water, air and gas 10 to 25 pounds pressure. These discs are recommended for use in Check Valves only for suction lines to pumps and low pressure systems.

**Nos. 946 and 946-A.** Soft, tough resilient discs for use in Check, Whistle, Safety, Selclo and Rapid Action Valves; also for Globe and Angle Valves where but slight effort is necessary to close them. **No. 946** is recommended for cold water, air and gas up to 50 pounds pressure and all classes of cold, wet and dry vacuum systems.

**No. 946-A** is recommended for oil and gasoline up to 50 pounds pressure at normal temperatures.

**Nos. 936 and 936-A.** Tough, resilient discs for use in Globe, Angle, Check and Self-Closing Valves. **No. 936**, regularly fitted in Jenkins Standard and Extra Heavy Check Valves, is recommended for cold water, air and gas from 50 to 250 pounds pressure or hot water not exceeding 200°F. **No. 936-A** is recommended for oil and gasoline up to 100 pounds pressure not exceeding 100°F.

**No. 1120.** A special composition for use in Globe and Angle Valves in saturated steam service between 150 and 250 pounds pressure.

**No. 110-H** A tough, semi-hard disc for hot water, not exceeding 250°, up to 250 pounds pressure, or cold water 250 to 400 pounds pressure. Recommended for Check Valves, both Standard and Extra Heavy, when intended for boiler feed lines. For steam pressure up to 25 pounds in Globe and Angle Valves.

**No. 165.** A soft yellow composition disc, recommended for use on Alcoholic Beverages, Liquid Foodstuffs up to 250 pounds pressure at normal temperature for Globe Angle and Check Valves.

**No. 80-A.** A composition disc for steam up to 100 pounds pressure, or hot water not exceeding 300°. Also recommended for hydraulic pressures from 400 to 800 pounds, when used in extra heavy valves.

**No. 119.** A hard dark red composition disc which is sufficiently resilient in service under steam pressure. For saturated (wet) steam 150 pounds pressure, not exceeding 366°. For Globe, Angle, Cross, Selclo, and Safety Valves.

**No. 808.** A hard disc for oil and gasoline, not exceeding 150°, for pressures up to 300 pounds. For Globe, Angle and Check Valves.

### List Price of Jenkins Renewable Composition Discs (Except No. 1120 Compound)

Fig. 101—Square Hole Disc

Code: ABTSH

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Fig. 101.....				.10	.12	.18	.24	.36	
Fig. 223.....	.06	.08	.08	.10	.12	.18	.24	.36	.48
Sizes.....	3	3 1/2	4	4 1/2	5	6	7	8	9
Fig. 223.....	.80	1.00	1.20	1.40	1.60	2.00	2.40	2.80	3.60
Sizes.....	10	12	14	16	18	20	22	24	
Fig. 223.....	4.50	5.00	7.00	8.00	10.00	12.00	15.00	18.00	

Fig. 223—Round Hole Disc

Code: ABULC

### List Price of No. 1120 Compound Disc

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
No. 1120.....	.25	.35	.35	.40	.50	.70	.85	1.30	1.70
Sizes.....	3	3 1/2	4	4 1/2	5	6	7	8	
No. 1120.....	2.65	2.95	3.75	4.35	5.10	6.45	7.70	8.80	



RENEWABLE COMPOSITION VALVE DISCS

Guide to Correct Disc Usage

SERVICE	PRESSURE Pounds per sq. in.	MAXIMUM TEMPERATURE Degrees Fahr.	DISC NUMBERS	
			For screw-operated globe, angle, cross and "Y" valves	For pressure operated self closing and check valves
SATURATED STEAM	Up to 25	267	110-H	110-H
	25— 100	338	80-A	....
	25— 150	366	119	119
	150— 250	406	1120	....
HOT WATER	Up to 50	200	110-H	936
	50— 300	200	110-H	110-H
	Up to 250	250	110-H	110-H
	Up to 50	300	80-A	110-H
	50— 500	300	80-A	80-A
COLD WATER	Up to 50	110	936	30
	50— 250	110	936	936
	250— 500	110	110-H	936
	500—1000	110	110-H	110-H
Disc Numbers 15, 93, 94, 946 and 110 are manufactured for Special services.				
AIR AND GAS	Vacuum to 25	Normal	936	30
	25— 150	Normal	936	946
	150— 250	Normal	936	936
	250— 500	Normal	1106	936
OIL	Up to 100	150	....	936-A
	Up to 250	225	119	119
GASOLINE	Up to 75	Normal	808	946-A
	75— 250	Normal	808	808
Acids and Alkalies (Moderate Concentrates)	Up to 250	Normal	119	119
Alcoholic Beverages Liquid Food-Stuffs	Up to 250	Normal	165	165
Industrial Solvents, Alco- hols and Miscellaneous Services	Composition Discs for these services will be supplied on request.			

RENEWABLE METAL VALVE DISCS

White Metal Disc

Fig. 648—Code: ABWGZ

For steam, air, gas, water, oil, gasoline and kerosene at pressures to 150 lbs. and not exceeding 365° F. For use in globe and angle valves. This disc furnishes a tight seat without the necessity of regrinding. It is especially

recommended for valves in which the seats are rounded.

Steam Metal Disc

Fig. 269—Code: ABURY

For steam pressures to 300 lbs., not exceeding 500° F.

List Prices of Figs. 648 and 269

Sizes.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	
Fig. 648.....	.08	.11	.11	.17	.28	.42	.50	.65	.90	1.25	
Fig. 269.....	.23	.23	.26	.32	.36	.45	.50	.55	1.00	1.40	
Sizes.....	3 1/2	4	4 1/2	5	6	7	8	9	10	12	14
Fig. 648.....	1.95	2.60	3.15	3.85	4.55	5.60	6.30	7.35	8.75	11.25	.....
Fig. 269.....	2.20	2.60	3.25	3.75	4.25	6.00	6.50	8.50	9.10	11.85	15.90

DISCS FOR SPECIAL SERVICE CONDITIONS

Although the discs listed on this and the preceding page will fulfill all usual requirements, it is recognized that frequently conditions arise which require discs of special composition. Jenkins Bros. maintains an Engineering Advisory Service to co-operate with valve users, apparatus manufacturers and prospective users, and assist them in solving such disc problems. This group of engineers invites inquiries or questions about discs for any service.

It is suggested that when in doubt about the proper disc, you include the service, working pressure, temperature, kind of valve and other information about the installation when ordering, so that our engineers completely understand the problem and can recommend accordingly.



## JENARCO SHEET PACKING

Jenarco Sheet Packing is a vulcanized rubber product, reddish in color, that has found favor everywhere with engineers, plumbers and steamfitters.

Jenarco Sheet Packing is extremely tough and strong. It will not become brittle and crack, nor crumble and squeeze out of the joint.

Jenarco makes an absolutely tight and durable joint. It is a splendid packing to use on any joint for saturated steam, maintaining perfect tightness under any pressure, whether high or low.

Jenarco is equally adapted for air, vacuum, hot or cold water and other services. Without any impairment in strength of pressure resisting qualities, it retains a degree of flexibility which insures perfect tightness under the most severe conditions. Because of its resiliency, Jenarco readily conforms to any irregularities of flange faces and assures tight joints.

Jenarco will not deteriorate with age. Use in tropical countries has proved its ability to withstand climatic conditions. It is easily applied and is always ready for service, making it is an excellent packing to keep in stock for regular and emergency requirements.

In the manufacture of Jenarco Sheet Packing, the same fine care is observed that characterizes the making of all other Jenkins products. Our extensive experience in the manufacture of



Fig. 398  
Code: ABVJF

rubber composition packings and other mechanical rubber goods is your definite assurance that Jenarco Sheet Packing will be found absolutely satisfactory.

The light weight of Jenarco makes it a most economical packing, as it is sold by the pound.

The regular stock width is 36 inches, but special widths can be made to order. Supplied plain, or reinforced with wire.

Put up in rolls of approximately 100 and 200 pounds each.

Gaskets cut from Jenarco Sheet Packing, to any standard, or special sizes can be furnished. See pages 216, 219 and 220.

### List Price of Jenarco Packing

Regular.....	1.00 per pound
With Brass Wire Insertion.....	1.25 per pound

### Approximate Weights per Square Yard

Thicknesses .....	$\frac{1}{32}$	$\frac{1}{16}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	inches
Regular.....	2 $\frac{3}{4}$	5 $\frac{1}{2}$	8 $\frac{1}{4}$	11	16 $\frac{1}{2}$	22 $\frac{1}{2}$	pounds
Brass Wire.....	...	8	10 $\frac{3}{4}$	13 $\frac{1}{2}$	19	25	pounds



JENKINS '96 SHEET PACKING

Jenkins '96 is a black unvulcanized rubber packing, compounded to form a sheet of great strength and durability, and is recommended for service where saturated steam is used, when the pressures do not exceed 250 lbs. nor temperatures above 400°F. It is flexible; will bend easily without cracking, and when used in a steam joint is soft enough to yield readily to all unevenness of flange surfaces, yet strong enough to prevent blowing or squeezing out when under pressure. Once set it forms a perfectly tight joint.

Vulcanization takes place after the joint is made. The action of the heat of the steam vulcanizes this packing between the flanges, while the ingredients have been so compounded that cracking or disintegration is prevented.

Thus a perfect joint is obtained; one which will withstand great pressure and present a smooth, hard, leak-proof surface as durable as the flange itself and capable of lasting as long as the rest of the installation.

Where it is desirable to break a joint made with Jenkins '96 Packing, the use of a little graphite applied to the surface of the gasket before it is put in place will prevent its adhesion to the metal, and the same gasket may be used again. For rough surfaces, where a thicker packing is desirable, two or more thicknesses of Jenkins '96 Packing can be used, for under the action of the steam, heat and pressure, these will amalgamate and become homogeneous units. Care should be taken to have the packing as thin as possible, as in all thick



Fig. 224  
Code: ABULE

joints more surface is exposed to pressure. A joint carefully followed up will last indefinitely and require no further attention.

It is recommended that bolts be followed after steam is supplied.

The light weight of Jenkins '96 makes it a most economical packing as it is sold by the pound.

The regular stock width is 36 inches. Special widths can be made to order at slight additional cost. Supplied plain or with brass wire insertion. Put up in rolls of approximately 100 and 200 pounds each.

Gaskets cut from Jenkins '96 Sheet Packing to any standard or special sizes can be furnished. See pages 216, 219 and 220.

List Price of Jenkins '96 Packing

Regular.....	1.00 per pound
With Brass Wire Insertion.....	1.25 per pound

Approximate Weights Per Square Yard

Thicknesses.....	1/32	1/16	3/32	1/8	3/16	1/4	inches
Regular .....	2 3/4	5 1/2	8 1/4	11	16 1/2	22 1/2	pounds
Brass Wire.....	...	8	10 3/4	13 1/2	19	25	pounds

INDEX



## OILTITE SHEET PACKING

This is an oil-tight packing, compounded of rubber and oil-resisting ingredients and vulcanized. It is recommended for use on lines conducting gasoline, kerosene, crude oil, creosote, diluted acids, ammonia, weak alkalis, etc. Oiltite Packing serves with utmost satisfaction wherever an oil-tight packing is required.

Oiltite Packing also can be used very successfully in steam and hot or cold water joints. It is easily applied, is tough and pliable, very durable and sufficiently resilient to conform to all inequalities of flange surface. It will not disintegrate, become brittle or squeeze out of the joint.

Regular stock width 36 inches, plain or with brass wire insertion.

Put up in rolls of approximately 100 and 200 pounds each.



Fig. 691  
Code: ABWKZ

### List Price Oiltite Packing

Regular.....	1.00 per pound
With Brass Wire Insertion.....	1.25 per pound

### Approximate Weights per Square Yard

Thicknesses.....	$\frac{1}{32}$	$\frac{1}{16}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	inches
Regular.....	$2\frac{5}{8}$	$5\frac{1}{4}$	$7\frac{7}{8}$	$10\frac{1}{2}$	$15\frac{3}{4}$	21	pounds
Brass Wire.....	...	$7\frac{3}{4}$	$10\frac{3}{8}$	13	$18\frac{1}{4}$	$23\frac{1}{2}$	pounds

## READY-CUT GASKETS



Ready-cut Gaskets cut from Jenkins '96, Jenarco, Oiltite or Asbestos Packing, ready for use in every kind of service can be supplied.

Where a number of gaskets are required, it is often found more economical to buy them ready-cut to size than to attempt to do this work on the job. Our facilities enable us to turn out any quantity, of any shape or size, cut from any of our standard or special packings, with a degree of accuracy difficult to obtain when the work is done by hand. In addition to this advantage, all waste is avoided.

Standard ring and full-face flange gaskets cut from Jenkins '96 and Jenarco Sheet Packing are generally carried in stock. In ordering special sizes it is desirable to send us a template,

or drawing showing both inside and outside diameters, and thickness of gaskets desired.

Prices of gaskets cut from Jenkins Asbestos Jointings are contained on pages 223, 224 and 225. Prices of Oiltite gaskets upon application. The tables on pages 219 and 226 give prices and sizes of gaskets cut from Jenarco or Jenkins '96 packings.

### Price, per Pound

Applies to Jenkins '96 and Jenarco

Gaskets 5 inches in diameter and over.....	2.00 per pound
Gaskets with bolt holes.....	.05 per pound net additional

Gaskets less than 5 inches in diameter, prices on application.



## PUMP VALVES

**T**HE compositions used in the manufacture of Jenkins Pump Valves are the result of years of experience and every effort has been put forth to produce a pump valve in each case perfectly suited for that service.

No substitutes for rubber are ever used; only pure rubber of the best quality is employed, which is compounded with ingredients so selected that each resulting composition will perform satisfactorily in its field.

Below is a schedule of principal compounds and service for which they are guaranteed. All of the standard sizes are supplied, as well as special pump valves for various uses. When ordering, should there be any doubt as to the grade of valve required, state the kind of ser-



Fig 227  
Code: ABULI

vice in which it is to be used, the fluid handled, pressure or head pump is working against, and in all cases give *diameter, thickness and size of hole.*

### Schedule of Principal Compounds and Service For Which Jenkins Pump Valves Are Recommended

**No. 80-A.** For hot water up to 250 pounds pressure, temperature not less than 180°F, nor more than 300°F.

In Air Compressor service these valves have been most satisfactory. While extremely hard, they possess sufficient resiliency to insure absolute tightness under various conditions of pressure. They will give entire satisfaction in oils, naphtha, syrups, acids, and other destructive fluids.

**No. 88.** For warm water up to 175 pounds pressure; cold water 50 to 400 pounds pressure. For mining and high pressure service, or for elevator service, where the water is often slightly oily, these valves have proved satisfactory to every requirement.

**No. 936.** For cold water up to 175 pounds pressure, or hot water up to 125 pounds pressure at not higher than 180°F.

**No. 946.** For cold water up to 100 pounds pressure.

**No. 15.** For cold water pressures up to 75 pounds, and for Condenser Air Pumps, etc.

Some types of Condenser Air Pumps use valves that are held closely to the seat at centre, curving up from that point to outer edge of valve as they lift. For this work, also for square or oblong flap valves, a soft valve is required, and for this purpose we recommend our No. 15 Compound. It is a tough, flexible valve, and will stand water heated to 120° under moderate pressure, and give long service.

**No. 30.** For cold water up to 50 pounds pressure.

#### Vacuum Service

In order to recommend the correct pump valve for use in vacuum pumps, it is necessary for us to know exactly the service conditions involved. For example, the pump used on the returns of a vacuum heating system, which often carry considerable oil, would require a different valve from a pump used in dry vacuum service. Ordinarily, any of our softer valves will give good service on vacuum work, but to secure the best valves for a specific purpose a brief description of the service in which the valves are to be used, should accompany the order.

List Prices of Pump Valves are listed on next page.



# JENKINS MECHANICAL RUBBER GOODS

## Dimensions and List Prices of Pump Valves

Dimensions				Dimensions				Dimensions				Dimensions			
Out- side Dia.	Thick- ness	Hole	List Price Each	Out- side Dia.	Thick- ness	Hole	List Price Each	Out- side Dia.	Thick- ness	Hole	List Price Each	Out- side Dia.	Thick- ness	Hole	List Price Each
2 1/8	1/2	1/2	.17	3 5/8	9/16	5/8	.56	4 5/8	5/8	5/8	.95	6 1/4	5/8	5/8	1.90
2	3/8	3/8	.14	3 5/8	5/8	5/8	.60	4 5/8	11/16	11/16	1.05	6 1/4	3/4	3/4	2.25
2 1/4	1/2	1/2	.20	3 3/4	1/2	1/2	.56	4 5/8	11/16	9/16	1.15	6 1/4	3/4	1/2	2.25
2 3/8	3/8	3/8	.17	3 3/4	5/8	5/8	.64	4 5/8	3/4	5/8	1.20	6 3/8	3/4	1/2	2.35
2 3/8	1/2	1/2	.20	3 3/4	5/8	3/8	.67	4 3/4	1/2	1 1/8	.82	6 3/8	7/8	1/2	2.75
2 1/2	3/8	3/8	.20	3 3/4	3/4	1/2	.70	4 3/4	1/2	5/8	.90	6 1/2	5/8	5/8	2.00
2 1/2	1/2	1/2	.23	3 7/8	1/2	1/2	.56	4 3/4	5/8	5/8	1.05	6 1/2	3/4	3/4	2.40
2 1/2	1/2	3/8	.25	3 7/8	3/4	1/2	.85	4 3/4	3/4	1 1/8	1.23	6 1/2	7/8	3/4	2.85
2 1/2	5/8	5/8	.28	4	1/2	11/16	.60	4 3/4	3/4	5/8	1.28	6 1/2	7/8	1/2	2.90
2 3/4	1/2	5/8	.28	4	1/2	1/2	.62	4 3/4	3/4	1/2	1.28	6 1/2	1	3/4	3.35
2 3/4	1/2	1/2	.28	4	9/16	5/8	.70	4 3/4	7/8	5/8	1.50	6 3/4	3/4	3/4	2.80
2 3/4	5/8	5/8	.34	4	5/8	3/4	.75	5	1/2	1/2	.90	6 3/4	1	3/4	3.60
3	1/2	1/2	.34	4	5/8	5/8	.76	5	5/8	5/8	1.20	7	5/8	5/8	2.45
3	1/2	3/8	.34	4	5/8	3/8	.80	5	3/4	3/4	1.45	7	3/4	3/4	3.10
3	5/8	1/2	.42	4	11/16	7/8	.82	5	3/4	5/8	1.45	7	7/8	1/2	3.30
3	5/8	5/8	.42	4	3/4	3/4	.90	5	3/4	1/2	1.45	7	1	1	3.80
3	3/4	1/2	.50	4	3/4	11/16	.90	5 1/8	3/4	1/2	1.50	7	1	3/4	3.80
3 1/8	1/2	1/2	.40	4	3/4	5/8	.90	5 1/4	5/8	3/4	1.28	7	1	1/2	3.80
3 1/8	5/8	5/8	.45	4 1/16	3/4	3/4	.92	5 1/4	5/8	5/8	1.36	7 1/4	5/8	5/8	2.60
3 1/8	5/8	1/2	.45	4 1/16	3/4	1/2	.95	5 1/4	3/4	11/16	1.56	7 1/4	3/4	3/4	3.15
3 1/4	1/2	1/2	.40	4 1/8	5/8	5/8	.98	5 1/4	3/4	5/8	1.56	7 1/4	1	3/4	4.25
3 1/4	1/2	3/8	.42	4 1/4	5/8	11/16	.85	5 1/2	5/8	5/8	1.45	7 3/8	7/8	1 1/4	4.50
3 1/4	5/8	5/8	.50	4 1/4	5/8	5/8	.85	5 1/2	3/4	11/16	1.65	7 1/2	5/8	5/8	2.70
3 1/4	5/8	3/8	.50	4 1/4	5/8	3/8	.88	5 1/2	3/4	5/8	1.67	7 1/2	3/4	3/4	3.25
3 3/8	1/2	5/8	.42	4 1/4	3/4	5/8	.95	5 1/2	3/4	1/2	1.73	7 1/2	3/4	1/2	3.35
3 1/2	1/2	5/8	.45	4 3/8	5/8	1/2	.92	5 1/2	7/8	3/4	2.00	7 1/2	7/8	1 1/2	3.80
3 1/2	1/2	1/2	.48	4 3/8	5/8	3/8	.92	5 3/4	3/4	5/8	1.85	7 1/2	1	1 1/8	4.25
3 1/2	9/16	5/8	.52	4 1/2	1/2	5/8	.76	6	1/2	1/2	1.36	7 1/2	1	3/4	4.30
3 1/2	5/8	11/16	.56	4 1/2	1/2	1/2	.80	6	5/8	5/8	1.80	8	3/4	3/4	3.80
3 1/2	5/8	5/8	.56	4 1/2	5/8	3/4	.80	6	3/4	7/8	2.05	8	7/8	1 1/4	3.80
3 1/2	5/8	3/8	.60	4 1/2	5/8	5/8	.95	6	3/4	3/4	2.05	8	7/8	1	4.25
3 1/2	3/4	1/2	.67	4 1/2	5/8	1/2	1.00	6	3/4	5/8	2.10	8	1	1	4.50
3 5/8	1/2	5/8	.50	4 1/2	3/4	5/8	1.15	6	3/4	1/2	2.10	8	1	3/4	5.00
3 5/8	1/2	1/2	.50	4 5/8	9/16	5/8	.85	6	7/8	1 1/4	2.35	8	1	5/8	5.00
								6	1	3/4	2.80	8	1	1/2	5.00

Prices of larger sizes on application. For principal compounds of Pump Valves, see preceding page.  
Pump Valves less than 3" in diameter with thickness or size of hole not listed above, prices on application.



JENKINS MECHANICAL RUBBER GOODS

RUBBER GASKETS

For Standard Flanges—American Standard

List Prices of "Full-Face" Gaskets  
Cut from Jenkins '96 or Jenarco  
Per 100 Gaskets

Nominal Pipe Size, Inches	Inside and Outside Diam.	Thicknesses			
		1/64"	1/32"	1/16"	1/8"
3/4	3/4 x 3 1/2	1.66	3.31	6.62	13.24
1	1 x 4 1/4	2.25	4.50	9.00	18.00
1 1/4	1 1/4 x 4 5/8	2.82	5.63	11.25	22.50
1 1/2	1 1/2 x 5	3.25	6.50	13.00	26.00
2	2 x 6	4.50	9.00	18.00	36.00
2 1/2	2 1/2 x 7	6.25	12.50	25.00	50.00
3	3 x 7 1/2	6.75	13.50	27.00	54.00
3 1/2	3 1/2 x 8 1/2	8.50	17.00	34.00	68.00
4	4 x 9	9.18	18.35	36.70	73.40
5	5 x 10	10.75	21.50	43.00	86.00
6	6 x 11	12.08	24.15	48.30	96.60
8	8 x 13 1/2	16.88	33.75	67.50	135.00
10	10 x 16	23.00	46.00	92.00	184.00
12	12 x 19	34.00	68.00	136.00	272.00
14	14 x 21	40.25	80.50	161.00	322.00
16	16 x 23 1/2	51.15	102.30	204.60	409.20
18	18 x 25	52.00	104.00	208.00	416.00
20	20 x 27 1/2	61.70	123.40	246.80	493.60
22	22 x 29 1/2	67.25	134.50	269.00	538.00
24	24 x 32	77.50	155.00	310.00	620.00
26	26 x 34 1/4	90.50	181.00	362.00	724.00
28	28 x 36 1/2	105.00	210.00	420.00	840.00
30	30 x 38 3/4	118.25	236.50	473.00	946.00
32	32 x 41 3/4	141.50	283.00	566.00	1132.00
34	34 x 43 3/4	149.00	298.00	596.00	1192.00
36	36 x 46	161.13	322.25	644.50	1289.00
38	38 x 48 3/4	184.25	368.50	737.00	1474.00
40	40 x 50 3/4	191.50	383.00	766.00	1532.00
42	42 x 53	205.25	410.50	821.00	1642.00
44	44 x 55 1/4	219.25	438.50	877.00	1754.00
46	46 x 57 1/4	228.00	456.00	912.00	1824.00
48	48 x 59 1/2	242.75	485.50	971.00	1942.00

Full-Face Gaskets are furnished without bolt holes. For bolt holes in Full-Face Gaskets increase correct list prices 10 per cent. before taking proper discount.

List Prices of "Ring" Gaskets  
Cut from Jenkins '96 or Jenarco  
Per 100 Gaskets

Nominal Pipe Size, Inches	Inside and Outside Diam.	Thicknesses			
		1/64"	1/32"	1/16"	1/8"
3/4	3/4 x 2 1/8	.63	1.26	2.52	5.04
1	1 x 2 5/8	1.02	2.04	4.07	8.14
1 1/4	1 1/4 x 3	1.29	2.58	5.15	10.30
1 1/2	1 1/2 x 3 3/8	1.64	3.27	6.53	13.06
2	2 x 4 1/8	2.25	4.50	9.00	18.00
2 1/2	2 1/2 x 4 7/8	3.07	6.13	12.25	24.50
3	3 x 5 3/8	3.44	6.88	13.75	27.50
3 1/2	3 1/2 x 6 3/8	4.94	9.88	19.75	39.50
4	4 x 6 7/8	5.75	11.50	23.00	46.00
5	5 x 7 3/4	6.44	12.88	25.75	51.50
6	6 x 8 3/4	7.25	14.50	29.00	58.00
8	8 x 11	10.35	20.70	41.40	82.80
10	10 x 13 3/8	14.25	28.50	57.00	114.00
12	12 x 16 1/8	21.75	43.50	87.00	174.00
14	14 x 17 3/4	22.25	44.50	89.00	178.00
16	16 x 20 1/4	29.75	59.50	119.00	238.00
18	18 x 21 5/8	31.00	62.00	124.00	248.00
20	20 x 23 7/8	33.25	66.50	133.00	266.00
22	22 x 26	38.50	77.00	154.00	308.00
24	24 x 28 1/4	46.25	92.50	185.00	370.00
26	26 x 30 1/2	54.25	108.50	217.00	434.00
28	28 x 32 3/4	62.75	125.50	251.00	502.00
30	30 x 34 3/4	65.00	130.00	260.00	520.00
32	32 x 37	76.75	153.50	307.00	614.00
34	34 x 39	81.75	163.50	327.00	654.00
36	36 x 41 1/4	91.75	183.50	367.00	734.00
38	38 x 43 5/8	105.50	211.00	422.00	844.00
40	40 x 45 5/8	110.25	220.50	441.00	882.00
42	42 x 48	122.50	245.50	491.00	982.00
44	44 x 50 1/8	134.50	269.50	539.00	1078.00
46	46 x 52 1/8	141.00	282.00	564.00	1128.00
48	48 x 54 1/2	153.75	307.50	615.00	1230.00

Odd size "Ring" gaskets can be supplied. Prices on application.

INDEX



# JENKINS MECHANICAL RUBBER GOODS

## RUBBER GASKETS

### For Extra Heavy Flanges—American Standard

#### List Prices of "Full-Face" Gaskets

Cut from Jenkins '96 or Jenarco

Per 100 Gaskets

Nom- inal Pipe Size, Inches	Inside and Outside Diam.	Thicknesses			
		$\frac{1}{64}$ "	$\frac{1}{32}$ "	$\frac{1}{16}$ "	$\frac{1}{8}$ "
1	1 x $4\frac{7}{8}$	2.40	4.80	9.60	19.20
$1\frac{1}{4}$	$1\frac{1}{4}$ x $5\frac{1}{4}$	2.95	5.90	11.80	23.60
$1\frac{1}{2}$	$1\frac{1}{2}$ x $6\frac{1}{8}$	4.25	8.50	17.00	34.00
2	2 x $6\frac{1}{2}$	5.25	10.50	21.00	42.00
$2\frac{1}{2}$	$2\frac{1}{2}$ x $7\frac{1}{2}$	6.25	12.50	25.00	50.00
3	3 x $8\frac{1}{4}$	7.38	14.75	29.50	59.00
$3\frac{1}{2}$	$3\frac{1}{2}$ x 9	8.75	17.50	35.00	70.00
4	4 x 10	10.57	21.13	42.25	84.50
5	5 x 11	12.13	24.25	48.50	97.00
6	6 x $12\frac{1}{2}$	15.13	30.25	60.50	121.00
8	8 x 15	20.24	40.48	80.95	161.90
10	10 x $17\frac{1}{2}$	26.88	53.75	107.50	215.00
12	12 x $20\frac{1}{2}$	36.88	73.75	147.50	295.00
14	$13\frac{1}{4}$ x 23	47.13	94.25	188.50	377.00
16	$15\frac{1}{4}$ x $25\frac{1}{2}$	55.63	111.25	222.50	445.00
18	17 x 28	66.25	132.50	265.00	530.00
20	19 x $30\frac{1}{2}$	75.99	151.98	303.95	607.90
22	21 x 33	86.53	173.05	346.10	792.20
24	23 x 36	102.43	204.85	409.70	819.40

Full-Face Gaskets are furnished without bolt holes. For bolt holes in Full-Face Gaskets increase correct list price 10 per cent. before taking proper discount.

#### List Prices of "Ring" Gaskets

Cut from Jenkins '96 or Jenarco

Per 100 Gaskets

Nom- inal Pipe Size, Inches	Inside and Outside Diam.	Thicknesses			
		$\frac{1}{64}$ "	$\frac{1}{32}$ "	$\frac{1}{16}$ "	$\frac{1}{8}$ "
1	1 x $2\frac{7}{8}$	1.25	2.50	5.00	10.00
$1\frac{1}{4}$	$1\frac{1}{4}$ x $3\frac{1}{4}$	1.57	3.13	6.25	12.50
$1\frac{1}{2}$	$1\frac{1}{2}$ x $3\frac{3}{4}$	2.25	4.50	9.00	18.00
2	2 x $4\frac{3}{8}$	2.64	5.28	10.56	21.12
$2\frac{1}{2}$	$2\frac{1}{2}$ x $5\frac{1}{8}$	3.57	7.13	14.25	28.50
3	3 x $5\frac{7}{8}$	4.75	9.50	19.00	38.00
$3\frac{1}{2}$	$3\frac{1}{2}$ x $6\frac{1}{2}$	5.75	11.50	23.00	46.00
4	4 x $7\frac{1}{8}$	6.57	13.13	26.25	52.50
5	5 x $8\frac{1}{2}$	8.92	17.83	35.66	71.32
6	6 x $9\frac{7}{8}$	11.63	23.25	46.50	93.00
8	8 x $12\frac{1}{8}$	16.38	32.75	65.50	131.00
10	10 x $14\frac{1}{4}$	20.00	40.00	80.00	160.00
12	12 x $16\frac{5}{8}$	25.75	51.50	103.00	206.00
14	$13\frac{1}{4}$ x $19\frac{1}{8}$	37.25	74.50	149.00	298.00
16	$15\frac{1}{4}$ x $21\frac{1}{4}$	45.50	91.00	182.00	364.00
18	17 x $23\frac{1}{2}$	51.75	103.50	207.00	414.00
20	19 x $25\frac{3}{4}$	59.32	118.63	237.25	474.50
22	21 x $27\frac{3}{4}$	64.25	128.50	257.00	514.00
24	23 x $30\frac{1}{2}$	78.75	157.50	315.00	630.00

Odd size "ring" gaskets can be supplied. Prices on application.



GASKET TUBING

Jenkins Gasket Tubing has proved most efficient for packing hand-holes, man-holes or any large steam joints of irregular shapes. It is carefully manufactured from the same compound as Jenkins' 96 sheet packing, described on page 215. It vulcanizes within the joint.

Jenkins Gasket Tubing is very economical to use because it can be fitted in large joints of any shape without any waste. In quick repair work, where a steam packing is required at once, the joint can be made with Jenkins Gasket Tubing in the time required to measure and cut a gasket from any of the sheetings.

It is regularly made in 3/8", 1/2", 5/8" and 3/4" diameters in lengths of about 12 feet. Packed in boxes, each containing 5 to 7 pounds together with a supply of plugs and adhesive tape.



Fig. 226  
Code: ABULG

Directions

Cut the tubing with ends beveled, insert the soft plug, one-half in each end, and fit the ends neatly together, wrapping the joint smoothly with the adhesive tape. The gasket is then ready for use.

List Price—\$1.25 Per Pound

BIBB WASHERS



Fig. 228  
Code: ABULK

Jenkins Bibb Washers are manufactured from a rubber compound specially prepared to withstand the severe conditions of hot and cold water service. Ordinarily supplied in a medium hard grade, they are also made of extra hard composition for use in hospitals, hotels and other places where extremely hot water and high pressures are encountered. Sizes 3/8", 1/2", 5/8", 3/4", 7/8" and 1" are carried in stock, but special sizes can be made to order. Packed in boxes of 100 each.

List Prices — \$2.75 per 100; \$25.00 per 1000

FULLER BALLS

Jenkins Fuller Balls are for use in Fuller Patent Compression Water Faucets. Regularly supplied in a medium-hard compound for hot and cold water services, an extra hard compound can be supplied for service in hotels, hospitals and other places where extremely hot water is encountered. Packed one pound to a box.



Fig. 229  
Code: ABULM

Sizes, Inches	Number per Pound	Price per Pound	Price per Dozen
3/8	158	2.25	.40
1/2	114	2.25	.45
5/8	82	2.25	.60
3/4	42	2.25	.90
1	28	2.25	1.50



## ASBESTOS JOINTING

Jenkins Asbestos Jointing is made to withstand very high temperatures, to resist great pressures and to safely meet every requirement of high pressure superheated steam service. It is of homogeneous construction and has a transverse (minimum) strength of 2600 pounds per square inch.

Intense pressure, together with careful, laboratory-controlled mixing, produces an absolutely moisture-proof or gas-tight packing. It is tough and pliable, cannot rot or squeeze out of a joint. It may be depended upon to last as long as the installation.

In addition to superheated steam service, Jenkins Asbestos Jointing is recommended for gas engines (all pressures and temperatures to 1000°F.); internal combustion engines, pumps and heaters; condensers; ammonia and brine lines; ice machines and wherever a high temperature acid or alkali-resisting joint is required.

Jenkins Asbestos Jointing will not deteriorate with age. A supply can always be kept on stock for regular and emergency requirements.



Fig. 685  
Code: ABWKM

The light weight of Jenkins Asbestos Jointing makes it a most economical packing, as it is sold by the pound.

The regular stock sheet is 36" x 126". Special sizes 54" x 63" and 108" x 126" can be supplied, but are not regularly stocked.

Gaskets cut from Jenkins Asbestos Jointing to any standard or special sizes can be furnished. See pages 223, 224 and 225.

### List Prices of Jenkins Asbestos Jointing

$\frac{1}{64}$ " Thick.....	1.25 per pound
$\frac{1}{32}$ ", $\frac{1}{16}$ ", $\frac{1}{8}$ " Thick.....	1.00 per pound

### Approximate Weights per Sheet 36" x 126"

Thicknesses, Inches.....	$\frac{1}{64}$	$\frac{1}{32}$	$\frac{1}{16}$	$\frac{1}{8}$
Weights, pounds.....	4 $\frac{3}{4}$	9 $\frac{1}{4}$	18 $\frac{3}{4}$	37 $\frac{1}{4}$



# JENKINS ASBESTOS JOINTING

## ASBESTOS GASKETS

### For Standard Flanges—American Standard

**List Prices of "Full-Face" Gaskets**  
Cut from Jenkins Asbestos Jointing  
Per 100 Gaskets

Nominal Pipe Size, Inches	Inside and Outside Diam.	Thicknesses			
		$\frac{1}{64}$ "	$\frac{1}{32}$ "	$\frac{1}{16}$ "	$\frac{1}{8}$ "
$\frac{3}{4}$	$\frac{3}{4}$ x $3\frac{1}{2}$	1.66	3.31	6.62	13.24
1	1 x $4\frac{1}{4}$	2.25	4.50	9.00	18.00
$1\frac{1}{4}$	$1\frac{1}{4}$ x $4\frac{5}{8}$	2.82	5.63	11.25	22.50
$1\frac{1}{2}$	$1\frac{1}{2}$ x 5	3.25	6.50	13.00	26.00
2	2 x 6	4.50	9.00	18.00	36.00
$2\frac{1}{2}$	$2\frac{1}{2}$ x 7	6.25	12.50	25.00	50.00
3	3 x $7\frac{1}{2}$	6.75	13.50	27.00	54.00
$3\frac{1}{2}$	$3\frac{1}{2}$ x $8\frac{1}{2}$	8.50	17.00	34.00	68.00
4	4 x 9	9.18	18.35	36.70	73.40
5	5 x 10	10.75	21.50	43.00	86.00
6	6 x 11	12.08	24.15	48.30	96.60
8	8 x $13\frac{1}{2}$	16.88	33.75	67.50	135.00
10	10 x 16	23.00	46.00	92.00	184.00
12	12 x 19	34.00	68.00	136.00	272.00
14	14 x 21	40.25	80.50	161.00	322.00
16	16 x $23\frac{1}{2}$	51.15	102.30	204.60	409.20
18	18 x 25	52.00	104.00	208.00	416.00
20	20 x $27\frac{1}{2}$	61.70	123.40	246.80	493.60
22	22 x $29\frac{1}{2}$	67.25	134.50	269.00	538.00
24	24 x 32	77.50	155.00	310.00	620.00
26	26 x $34\frac{1}{4}$	90.50	181.00	362.00	724.00
28	28 x $36\frac{1}{2}$	105.00	210.00	420.00	840.00
30	30 x $38\frac{3}{4}$	118.25	236.50	473.00	946.00
32	32 x $41\frac{3}{4}$	141.50	283.00	566.00	1132.00
34	34 x $43\frac{3}{4}$	149.00	298.00	596.00	1192.00
36	36 x 46	161.13	322.25	644.50	1289.00
38	38 x $48\frac{3}{4}$	184.25	368.50	737.00	1474.00
40	40 x $50\frac{3}{4}$	191.50	383.00	766.00	1532.00
42	42 x 53	205.25	410.50	821.00	1642.00
44	44 x $55\frac{1}{4}$	219.25	438.50	877.00	1754.00
46	46 x $57\frac{1}{4}$	228.00	456.00	912.00	1824.00
48	48 x $59\frac{1}{2}$	242.75	485.50	971.00	1942.00

Full-Face Gaskets are furnished without bolt holes. For bolt holes in Full-Face Gaskets increase correct list prices 10 per cent. before taking proper discount.

**List Prices of "Ring" Gaskets**  
Cut from Jenkins Asbestos Jointing  
Per 100 Gaskets

Nominal Pipe Size, Inches	Inside and Outside Diam.	Thicknesses			
		$\frac{1}{64}$ "	$\frac{1}{32}$ "	$\frac{1}{16}$ "	$\frac{1}{8}$ "
$\frac{3}{4}$	$\frac{3}{4}$ x $2\frac{1}{8}$	.63	1.26	2.52	5.04
1	1 x $2\frac{5}{8}$	1.02	2.04	4.07	8.14
$1\frac{1}{4}$	$1\frac{1}{4}$ x 3	1.29	2.58	5.15	10.30
$1\frac{1}{2}$	$1\frac{1}{2}$ x $3\frac{3}{8}$	1.64	3.27	6.53	13.06
2	2 x $4\frac{1}{8}$	2.25	4.50	9.00	18.00
$2\frac{1}{2}$	$2\frac{1}{2}$ x $4\frac{7}{8}$	3.07	6.13	12.25	24.50
3	3 x $5\frac{3}{8}$	3.44	6.88	13.75	27.50
$3\frac{1}{2}$	$3\frac{1}{2}$ x $6\frac{3}{8}$	4.94	9.88	19.75	39.50
4	4 x $6\frac{7}{8}$	5.75	11.50	23.00	46.00
5	5 x $7\frac{3}{4}$	6.44	12.88	25.75	51.50
6	6 x $8\frac{3}{4}$	7.25	14.50	29.00	58.00
8	8 x 11	10.35	20.70	41.40	82.80
10	10 x $13\frac{3}{8}$	14.25	28.50	57.00	114.00
12	12 x $16\frac{1}{8}$	21.75	43.50	87.00	174.00
14	14 x $17\frac{3}{4}$	22.25	44.50	89.00	178.00
16	16 x $20\frac{1}{4}$	29.75	59.50	119.00	238.00
18	18 x $21\frac{5}{8}$	31.00	62.00	124.00	248.00
20	20 x $23\frac{7}{8}$	33.25	66.50	133.00	266.00
22	22 x 26	38.50	77.00	154.00	308.00
24	24 x $28\frac{1}{4}$	46.25	92.50	185.00	370.00
26	26 x $30\frac{1}{2}$	54.25	108.50	217.00	434.00
28	28 x $32\frac{3}{4}$	62.75	125.50	251.00	502.00
30	30 x $34\frac{3}{4}$	65.00	130.00	260.00	520.00
32	32 x 37	76.75	153.50	307.00	614.00
34	34 x 39	81.75	163.50	327.00	654.00
36	36 x $41\frac{1}{4}$	91.75	183.50	367.00	734.00
38	38 x $43\frac{5}{8}$	105.50	211.00	422.00	844.00
40	40 x $45\frac{5}{8}$	110.25	220.50	441.00	882.00
42	42 x 48	122.50	245.50	491.00	982.00
44	44 x $50\frac{1}{8}$	134.50	269.50	539.00	1078.00
46	46 x $52\frac{1}{8}$	141.00	282.00	564.00	1128.00
48	48 x $54\frac{1}{2}$	153.75	307.50	615.00	1230.00

Odd size "Ring" gaskets can be supplied. Prices on application.



## ASBESTOS GASKETS

For Extra Heavy Flanges—American Standard

**List Prices of "Full-Face" Gaskets**  
Cut from Jenkins Asbestos Jointing  
Per 100 Gaskets

Nom- inal Pipe Size, Inches	Inside and Outside Diam.	Thicknesses			
		$\frac{1}{64}$ "	$\frac{1}{32}$ "	$\frac{1}{16}$ "	$\frac{1}{8}$ "
1	1 x $4\frac{7}{8}$	2.40	4.80	9.60	19.20
$1\frac{1}{4}$	$1\frac{1}{4}$ x $5\frac{1}{4}$	2.95	5.90	11.80	23.60
$1\frac{1}{2}$	$1\frac{1}{2}$ x $6\frac{1}{8}$	4.25	8.50	17.00	34.00
2	2 x $6\frac{1}{2}$	5.25	10.50	21.00	42.00
$2\frac{1}{2}$	$2\frac{1}{2}$ x $7\frac{1}{2}$	6.25	12.50	25.00	50.00
3	3 x $8\frac{1}{4}$	7.38	14.75	29.50	59.00
$3\frac{1}{2}$	$3\frac{1}{2}$ x 9	8.75	17.50	35.00	70.00
4	4 x 10	10.57	21.13	42.25	84.50
5	5 x 11	12.13	24.25	48.50	97.00
6	6 x $12\frac{1}{2}$	15.13	30.25	60.50	121.00
8	8 x 15	20.24	40.48	80.95	161.90
10	10 x $17\frac{1}{2}$	26.88	53.75	107.50	215.00
12	12 x $20\frac{1}{2}$	36.88	73.75	147.50	295.00
14	$13\frac{1}{4}$ x 23	47.13	94.25	188.50	377.00
16	$15\frac{1}{4}$ x $25\frac{1}{2}$	55.63	111.25	222.50	445.00
18	17 x 28	66.25	132.50	265.00	530.00
20	19 x $30\frac{1}{2}$	75.99	151.98	303.95	607.90
22	21 x 33	86.53	173.05	346.10	792.20
24	23 x 36	102.43	204.85	409.70	819.40

Full-Face Gaskets are furnished without bolt holes. For bolt holes in Full-Face Gaskets increase correct list price 10 per cent. before taking proper discount.

**List Prices of "Ring" Gaskets**  
Cut from Jenkins Asbestos Jointing  
Per 100 Gaskets

Nom- inal Pipe Size, Inches	Inside and Outside Diam.	Thicknesses			
		$\frac{1}{64}$ "	$\frac{1}{32}$ "	$\frac{1}{16}$ "	$\frac{1}{8}$ "
1	1 x $2\frac{7}{8}$	1.25	2.50	5.00	10.00
$1\frac{1}{4}$	$1\frac{1}{4}$ x $3\frac{1}{4}$	1.57	3.13	6.25	12.50
$1\frac{1}{2}$	$1\frac{1}{2}$ x $3\frac{3}{4}$	2.25	4.50	9.00	18.00
2	2 x $4\frac{3}{8}$	2.64	5.28	10.56	21.12
$2\frac{1}{2}$	$2\frac{1}{2}$ x $5\frac{1}{8}$	3.57	7.13	14.25	28.50
3	3 x $5\frac{7}{8}$	4.75	9.50	19.00	38.00
$3\frac{1}{2}$	$3\frac{1}{2}$ x $6\frac{1}{2}$	5.75	11.50	23.00	46.00
4	4 x $7\frac{1}{8}$	6.57	13.13	26.25	52.50
5	5 x $8\frac{1}{2}$	8.92	17.83	35.66	71.32
6	6 x $9\frac{7}{8}$	11.63	23.25	46.50	93.00
8	8 x $12\frac{1}{8}$	16.38	32.75	65.50	131.00
10	10 x $14\frac{1}{4}$	20.00	40.00	80.00	160.00
12	12 x $16\frac{5}{8}$	25.75	51.50	103.00	206.00
14	$13\frac{1}{4}$ x $19\frac{1}{8}$	37.25	74.50	149.00	298.00
16	$15\frac{1}{4}$ x $21\frac{1}{4}$	45.50	91.00	182.00	364.00
18	17 x $23\frac{1}{2}$	51.75	103.50	207.00	414.00
20	19 x $25\frac{3}{4}$	59.32	118.63	237.25	474.50
22	21 x $27\frac{3}{4}$	64.25	128.50	257.00	514.00
24	23 x $30\frac{1}{2}$	78.75	157.50	315.00	630.00

Odd size "ring" gaskets can be supplied. Prices on application.



## ASBESTOS GASKETS For Steel Flanges

For 150 Pounds Pressure  
List Prices of "Ring" Gaskets  
Cut from Jenkins Asbestos Jointing  
Per 100 Gaskets

Nom- inal Pipe Size, Inches	Inside and Out- side Diam.	Thickness			
		$\frac{1}{64}''$	$\frac{1}{32}''$	$\frac{1}{16}''$	$\frac{1}{8}''$
$\frac{3}{4}$	* *	*	*	*	*
1	1 x $2\frac{5}{8}$	*	*	*	*
$1\frac{1}{4}$	$1\frac{1}{4}$ x 3	*	*	*	*
$1\frac{1}{2}$	$1\frac{1}{2}$ x $3\frac{3}{8}$	*	*	*	*
2	2 x $4\frac{1}{8}$	2.25	4.50	9.00	18.00
$2\frac{1}{2}$	$2\frac{1}{2}$ x $4\frac{7}{8}$	3.07	6.13	12.25	24.50
3	3 x $5\frac{3}{8}$	3.44	6.88	13.75	27.50
4	4 x $6\frac{7}{8}$	5.75	11.50	23.00	46.00
5	5 x $7\frac{3}{4}$	6.44	12.88	25.75	51.50
6	6 x $8\frac{3}{4}$	7.25	14.50	29.00	58.00
8	8 x 11	10.35	20.70	41.40	82.80
10	10 x $13\frac{3}{8}$	14.25	28.50	57.00	114.00
12	12 x $16\frac{1}{8}$	21.75	43.50	87.00	174.00
14	14 x $17\frac{3}{4}$	22.25	44.50	89.00	178.00
16	16 x $20\frac{1}{4}$	29.75	59.50	119.00	238.00
18	18 x $21\frac{5}{8}$	31.00	62.00	124.00	248.00
20	20 x $23\frac{7}{8}$	33.25	66.50	133.00	266.00
24	24 x $28\frac{1}{4}$	46.25	92.50	185.00	370.00

For 250 Pounds Pressure  
List Prices of "Ring" Gaskets  
Cut from Jenkins Asbestos Jointing  
Per 100 Gaskets

Nom- inal Pipe Size, Inches	Inside and Out- side Diam.	Thickness			
		$\frac{1}{64}''$	$\frac{1}{32}''$	$\frac{1}{16}''$	$\frac{1}{8}''$
$\frac{3}{4}$	$\frac{3}{4}$ x $2\frac{5}{8}$	1.10	2.20	4.40	8.80
1	1 x $2\frac{7}{8}$	1.25	2.50	5.00	10.00
$1\frac{1}{4}$	$1\frac{1}{4}$ x $3\frac{1}{4}$	1.57	3.13	6.25	12.50
$1\frac{1}{2}$	$1\frac{1}{2}$ x $3\frac{3}{4}$	2.25	4.50	9.00	18.00
2	2 x $4\frac{3}{8}$	2.74	5.48	10.55	21.10
$2\frac{1}{2}$	$2\frac{1}{2}$ x $5\frac{1}{8}$	3.57	7.13	14.25	28.50
3	3 x $5\frac{7}{8}$	4.75	9.50	19.00	38.00
4	4 x $7\frac{1}{8}$	6.57	13.13	26.25	52.50
5	5 x $8\frac{1}{2}$	8.92	17.83	35.66	71.32
6	6 x $9\frac{7}{8}$	11.63	23.25	46.50	93.00
8	8 x $12\frac{1}{8}$	16.38	32.75	65.50	131.00
10	10 x $14\frac{1}{4}$	20.00	40.00	80.00	160.00
12	12 x $16\frac{5}{8}$	25.75	51.50	103.00	206.00
14	$13\frac{1}{4}$ x $19\frac{1}{8}$	37.25	74.50	149.00	298.00
16	$15\frac{1}{4}$ x $21\frac{1}{4}$	45.50	91.00	182.00	364.00
18	17 x $23\frac{1}{2}$	51.75	103.50	207.00	414.00
20	19 x $25\frac{3}{4}$	59.32	118.63	237.25	474.50
24	23 x $30\frac{1}{2}$	78.75	157.50	315.00	630.00



## SHIPPING INSTRUCTIONS AND INQUIRIES

Remarks	Code Word
Can——accept order.....	KUMEL
Can——cancel order.....	KUMES
Cancel order No. ....	KUMIN
Change order No. —— to read.....	KUNAD
Enter order and hold for shipping instructions.....	KUNAP
Enter order as instructed.....	KUNAY
Enter order as per letter (of).....	KUNBE
Enter order as per quotation (of).....	KUNCO
Enter order No. —— (for).....	KUNEJ
Enter order No. —— (for) and ship (to).....	KUNET
Enter order for immediate shipment.....	KUNGE
Duplicate —— order No. ....	KUNHY
Duplicate shipment —— order No. ....	KUNIA
Have —— received order.....	KUNIO
Order No. (is).....	KUPAD
Order should read.....	KUPAX
Previously ordered.....	KUPEN
Trace —— order No. ....	KUPID
Try to send —— order.....	KUPKY
Advise price and delivery (on).....	LERLI
At what price can —— furnish.....	LEROW
At what price and how soon can —— furnish.....	LERTI
Does price include ——.....	LESAH
Mail price and delivery (to).....	LESDI
Are you shipping today.....	MAYAC
Can —— commence shipping.....	MAYAR
Can —— ship.....	MAYBI
Can —— ship from stock.....	MAYCA
Change shipping instructions (to).....	MAYDO
Did —— ship (order No.).....	MAYEL
Has —— been shipped.....	MAYEW
How did —— ship (order).....	MAYFI
How soon can —— ship.....	MAYHE
If cannot ship by time specified, advise by wire (cable).....	MAYID
If heavy for mail, ship by express.....	MAYIT
Must be shipped (before).....	MAYLA
Prices each net, sales tax included, F.O.B.....	LETGB
Prices each net, sales tax extra, F.O.B.....	LETGC
Reship (to).....	MAYME
Ship at once, urgently needed.....	MAYPO
Ship balance.....	MAYRE
Ship on our order No. ——, will confirm by mail.....	MAYTI
Ship via airplane.....	MAYUL
Ship via boat.....	MAYUW
Ship via boat and rail.....	MAZAD
Ship via cheapest route.....	MEABO
Ship via express.....	MEACY
Ship via express, C.O.D.....	MEADA
Ship via express prepaid.....	MEADE
Ship via express today or wire reply.....	MEAFa
Ship via freight.....	MEAGH
Ship via fast freight.....	MEAHO
Ship via fast freight prepaid.....	MEAKI
Ship via fast freight today or wire reply.....	MEALE
Ship via lake and rail prepaid.....	MEAMY
Ship via lake and rail collect.....	MEAPA
Ship via motor transport prepaid.....	MEARO
Ship via motor transport collect.....	MEAST
Ship via Panama Canal.....	MEATE
Ship via parcel post.....	MEBAC
Ship via parcel post, C.O.D.....	MEADB
Ship via pool car, prepaid.....	MEBEH
Ship via pool car, collect.....	MEBET
Ship via rail.....	MEBIB
Ship via all rail, prepaid.....	MEBIM



## SHIPPING INSTRUCTIONS AND INQUIRIES—Continued

Remarks	Code Word
Ship via all rail collect.....	MEBIY
Ship via special delivery.....	MEBLA
Ship via usual route.....	MEBNE
Ship what you can from stock, balance to follow.....	MEBOD
Ship what you can from stock, cancel balance.....	MEBOR
Ship what you can from stock. Telegraph shortage, and when you can complete.....	MEBOY
Ship with draft attached.....	MEBTO
Ship with draft through bank.....	MEBUK
Ship with other goods.....	MEBUT
Shipping instructions by mail.....	MECIW
Shipping instructions to follow.....	MECKI
When are you shipping our order.....	MECLA
Why do you not ship our order.....	MECNE
Will _____ ship (on).....	MECOD
Can _____ make complete shipment.....	MEDAX
Did _____ make _____ shipment.....	MEDEL
Duplicate shipment order No. _____.....	MEDEP
Hold shipment order No. _____.....	MEDOY
Hold shipment for sufficient weight for freight allowance.....	DEDPA
Make part shipment at once.....	MEFAK
Rush shipment.....	MEFOK
Trace _____ shipment (of).....	MEGIS
Will _____ make complete shipment (on).....	MEGLO
Will _____ trace shipment.....	MEGNE
Arrange for _____ transportation.....	MUHAT
Will _____ arrange for _____ transportation.....	MUHEK

## ANSWERS

Remarks	Code Word
Immediate acceptance (of).....	BAFAJ
Recommend acceptance (of).....	BAFAR
Advice at once if _____ satisfactory.....	BAMOC
Send _____ blueprint.....	CALUW
Catalogue obsolete, See No. _____.....	COGAB
Latest catalogue (No.) _____.....	COGER
Refer to catalogue No. _____ page _____.....	COGIS
Specify diameter.....	ETNOR
Specify diameter and number of threads per inch.....	ETNUX
Send detailed information.....	HICEH
Balance _____ order No. _____ shipped (by).....	KULUG
Cancelled order No. _____.....	KUMOS
Cannot cancel order, goods shipped.....	KUMUG
Care should be taken in ordering.....	KUMUT
Give date and number of order referred to.....	KUNIG
Made to order only.....	KUNUJ
Order does not specify.....	KUNUR
When ordering give pressure, service and conditions.....	KUPLA
Lump sum price complete specification, F.O.B. _____ sales tax included.....	LESCA
Lump sum price complete specification, F.O.B. _____ sales tax extra.....	LESCB
Necessary to send sample(s) (of).....	MAFAT
Necessary to send sample coupling.....	MAFEG
May we ship (order).....	MAYKO
Reshipped (to).....	MAYNE
Send shipping instructions.....	MAYOG
Shall we ship what we have ready, balance to follow.....	MAYOS
Shipped balance.....	MECAL
Shipped from factory (on).....	MECAP
Shipped order (on).....	MECEN
Shipped to factory (on).....	MECEX
Shipment goes forward.....	MEGIB
Shipment within time specified.....	MEGIL
May we ship shortage.....	MEGUK
Approximate weight pounds (is).....	NATEM
Approximate weight per square yard (is).....	NATEY
List of weights, see page _____ Catalogue No. _____.....	NATOL



## CANADIAN CURRENCY

Amt.	Code Word	Amt.	Code Word	Amt.	Code Word	Amt.	Code Word
\$0.01	TUBJA	\$0.55	TUPAY	\$10.00	TYAWM	\$64.00	UAFDE
.02	TUJEC	.56	TUPED	11.00	TYCID	65.00	UAFEC
.03	TUJFY	.57	TUPFO	12.00	TYDUX	66.00	UAFEM
.04	TUJIK	.58	TUPIF	13.00	TYEUN	67.00	UAFFY
.05	TUJJU	.59	TUPKA	14.00	TYGUP	68.00	UAFHE
.06	TUJNA	.60	TUPNO	15.00	TYIJA	69.00	UAFIK
.07	TUJOP	.61	TUPOV	16.00	TYJUD	70.00	UAFIX
.08	TUJTI	.62	TUPSY	17.00	TYLDO	71.00	UAFJU
.09	TUJUS	.63	TUPUX	18.00	TYMKO	72.00	UAFLY
.10	TUKAZ	.64	TURBA	19.00	TYNUR	73.00	UAFNA
.11	TUKEB	.65	TUREB	20.00	TYOUD	74.00	UAFOP
.12	TUKFI	.66	TURFI	21.00	TYRBO	75.00	UAFOP
.13	TUKIK	.67	TURIJ	22.00	TYRIB	76.00	UAFRU
.14	TUKKE	.68	TURJU	23.00	TYROH	77.00	UAFRI
.15	TUKNA	.69	TURNA	24.00	TYRUR	78.00	UAFUF
.16	TUKOP	.70	TUROM	25.00	TYSEF	79.00	UAFUS
.17	TUKTI	.71	TURTA	26.00	TYSEF	80.00	UAGAR
.18	TUKUS	.72	TURUP	27.00	TYTGE	81.00	UAGAZ
.19	TULBE	.73	TUSAY	28.00	TYTMI	82.00	UAGDE
.20	TULED	.74	TUSED	29.00	TYTUCI	83.00	UAGEC
.21	TULFO	.75	TUSFE	30.00	TYTUCI	84.00	UAGEP
.22	TULIF	.76	TUSIF	31.00	TYUGO	85.00	UAGFY
.23	TULKA	.77	TUSKA	32.00	TYULD	86.00	UAGHE
.24	TULNU	.78	TUSNU	33.00	TYUON	87.00	UAGIK
.25	TULOV	.79	TUSOZ	34.00	TYUSY	88.00	UAGIX
.26	TULTO	.80	TUSSY	35.00	TYUYT	89.00	UAGKE
.27	TULUX	.81	TUSUV	36.00	TYVIF	90.00	UAGLY
.28	TUMBE	.82	TUTAZ	37.00	TYVUX	91.00	UAGNA
.29	TUMEH	.83	TUTEB	38.00	TYWOP	92.00	UAGOF
.30	TUMFO	.84	TUTFI	39.00	TYXAS	93.00	UAGOP
.31	TUMIF	.85	TUTID	40.00	TYZAC	94.00	UAGSE
.32	TUMKA	.86	TUTJO	41.00	TYZIS	95.00	UAGTI
.33	TUMNU	.87	TUTMU	42.00	TYZYF	96.00	UAGUF
.34	TUMOS	.88	TUTOS	43.00	UABEC	97.00	UAGUS
.35	TUMSY	.89	TUTTY	44.00	UABIX	98.00	UAHAM
.36	TUMUV	.90	TUTUS	45.00	UABOP	99.00	UAHBE
.37	TUNAZ	.91	TUVAZ	46.00	UACAR	100.00	UAHCO
.38	TUNEC	.92	TUVEW	47.00	UACFI	200.00	UAHCO
.39	TUNFY	.93	TUVIZ	48.00	UACLY	300.00	UAHCO
.40	TUNIJ	.94	TUVOY	49.00	UACLI	400.00	UAHCO
.41	TUNJU	.95	TUVUY	50.00	UADCO	500.00	UAHCO
.42	TUNNA	.96	TUWAG	51.00	UADIF	600.00	UAHCO
.43	TUNOP	.97	TUWEK	52.00	UADOK	700.00	UAHCO
.44	TUNTI	.98	TUWIM	53.00	UADPA	800.00	UAHCO
.45	TUNUP	.99	TUWOR	54.00	UADRI	900.00	UAHCO
.46	TUOCU	1.00	TUWUT	55.00	UADTU	1,000.00	UAHCO
.47	TUOGE	2.00	TUZAZ	56.00	UADUN	2,000.00	UAHCO
.48	TUOJI	3.00	TWAMU	57.00	UADUX	3,000.00	UAHCO
.49	TUOLO	4.00	TWEIX	58.00	UAFAT	4,000.00	UAHCO
.50	TUOND	5.00	TWIFT	59.00	UAFBA	5,000.00	UAHCO
.51	TUORD	6.00	TWOCE	60.00		6,000.00	UAHCO
.52	TUOSU	7.00	TWOYA	61.00		7,000.00	UAHCO
.53	TUOWY	8.00	TWUUF	62.00		8,000.00	UAHCO
.54	TUOZY	9.00	TYAAR	63.00		9,000.00	UAHCO
						10,000.00	UAHCO



# J E N K I N S      P R I V A T E      C O D E

## NUMERALS FOR QUANTITY AND SIZE COMBINED

Quantity	Sizes $\frac{1}{8}$ " to 1"					
	$\frac{1}{8}$ "	$\frac{1}{4}$ "	$\frac{3}{8}$ "	$\frac{1}{2}$ "	$\frac{3}{4}$ "	1"
1	WIABE	WIBIR	WICBY	WICMU	WICUP	WIDGE
2	WIABO	WIBKE	WICCA	WICMY	WICUS	WIDGO
3	WIADA	WIBKU	WICCI	WICNA	WICUY	WIDGU
4	WIADI	WIBLA	WICDE	WICNE	WIDAC	WIDHA
5	WIAFE	WIBLI	WICDO	WICNI	WIDAE	WIDHI
6	WIAFU	WIBLY	WICDU	WICOB	WIDAG	WIDIB
7	WIAHN	WIBME	WICEB	WICOF	WIDAH	WIDIC
8	WIAKE	WIBMO	WICED	WICOL	WIDAL	WIDIF
9	WIAKO	WIBNI	WICEF	WICOM	WIDAM	WIDIH
10	WIALA	WIBNU	WICEL	WICOP	WIDAP	WIDIL
12	WIALT	WIBOC	WICEP	WICOS	WIDAR	WIDIN
15	WIAMH	WIBOL	WICEV	WICOX	WIDAS	WIDIP
18	WIAMO	WIBOP	WICFA	WICPE	WIDAY	WIDJA
20	WIANA	WIBOX	WICFI	WICPO	WIDBA	WIDJI
24	WIANK	WIBPE	WICHE	WICPU	WIDBE	WIDKA
25	WIANU	WIBPO	WICHO	WICRE	WIDBO	WIDKI
30	WIAPE	WIBPU	WICHU	WICRO	WIDBU	WIDLA
36	WIARG	WIBRE	WICID	WICRU	WIDCE	WIDLE
40	WIARP	WIBRO	WICIH	WICRY	WIDCO	WIDLO
48	WIASL	WIBRY	WICIK	WICSE	WIDCU	WIDLU
50	WIATA	WIBSU	WICIN	WICSO	WIDDA	WIDMA
60	WIATO	WIBTA	WICIR	WICSU	WIDDI	WIDMI
70	WIAWI	WIBTI	WICIT	WICTA	WIDDO	WIDMY
72	WIBAC	WIBUC	WICIX	WICTE	WIDED	WIDNE
80	WIBAN	WIBUG	WICJE	WICTI	WIDEH	WIDNO
84	WIBAT	WIBUM	WICJO	WICTY	WID EK	WIDNU
90	WIBEB	WICAD	WICKE	WICUB	WIDET	WIDOA
96	WIBEG	WICAH	WICKO	WICUD	WIDEX	WIDOD
100	WIBEL	WICAK	WICKU	WICUE	WIDFA	WIDOE
144	WIBEP	WICAR	WICLA	WICUG	WIDFE	WIDOG
150	WIBIA	WICAT	WICLI	WICUH	WIDFI	WIDOH
200	WIBID	WICBA	WICME	WICUL	WIDFO	WIDOK
250	WIBIK	WICBI	WICMO	WICUM	WIDFU	WIDON

Quantity	Sizes $1\frac{1}{4}$ " to $3\frac{1}{2}$ "					
	$1\frac{1}{4}$ "	$1\frac{1}{2}$ "	2"	$2\frac{1}{2}$ "	3"	$3\frac{1}{2}$ "
1	WIDOR	WIEFI	WIEVA	WIFHE	WIFOX	WIGBI
2	WIDOT	WIEFS	WIEVE	WIFHO	WIFPE	WIGCA
3	WIDOX	WIEGA	WIEVY	WIFIB	WIFPO	WIGDE
4	WID OZ	WIEGL	WIEWA	WIFID	WIFRA	WIGDO
5	WIDPA	WIEGT	WIEWO	WIFIH	WIFRE	WIGDU
6	WIDPI	WIEHE	WIEXA	WIFIK	WIFRO	WIGEB
7	WIDPU	WIEHO	WIFAC	WIFIN	WIFRU	WIGEC
8	WIDRE	WIEJO	WIFAD	WIFIR	WIFSE	WIGEF
9	WIDRO	WIEKA	WIFAH	WIFIT	WIFSO	WIGEG
10	WIDRY	WIEKI	WIFAK	WIFIW	WIFSU	WIG EJ
12	WIDSA	WIEKS	WIFAN	WIFIZ	WIFTA	WIGEL
15	WIDSI	WIELA	WIFAR	WIFJE	WIFTE	WIGEM
18	WIDTA	WIELE	WIFAT	WIFJO	WIFTI	WIGEP
20	WIDTE	WIELN	WIFAX	WIFKA	WIFTY	WIGES
24	WIDTI	WIELS	WIFBA	WIFKE	WIFUA	WIG EZ
25	WIDTO	WIEMA	WIFBI	WIFKO	WIFUC	WIGFA
30	WIDUD	WIENE	WIFBO	WIFKU	WIFUF	WIGFI
36	WIDUH	WIENL	WIFCA	WIFLA	WIFUG	WIGGA
40	WIDUK	WIENO	WIFCI	WIFLI	WIFUL	WIGGI
48	WIDUN	WIENT	WIFDE	WIFLY	WIFUM	WIGGU
50	WIDUR	WIEPA	WIFDO	WIFME	WIFUP	WIGHE
60	WIDUT	WIEPI	WIFDU	WIFMO	WIFUR	WIGHO



# J E N K I N S P R I V A T E C O D E

## NUMERALS FOR QUANTITY AND SIZE COMBINED—Cont.

Quantity	Sizes 1 $\frac{1}{4}$ " to 3 $\frac{1}{2}$ "					
	1 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	2"	2 $\frac{1}{2}$ "	3"	3 $\frac{1}{2}$ "
70	WIDUX	WIEPY	WIFEB	WIFMU	WIGAB	WIGHU
72	WIDUZ	WIERE	WIFEC	WIFNA	WIGAC	WIGHY
80	WIEBA	WIERH	WIFEG	WIFNE	WIGAD	WIGIA
84	WIEBI	WIERL	WIFEL	WIFNI	WIGAH	WIGID
90	WIEBO	WIERT	WIFEN	WIFOB	WIGAK	WIGIH
96	WIECA	WIESA	WIFER	WIFOC	WIGAN	WIGIK
100	WIECI	WIESL	WIFEZ	WIFO	WIGAR	WIGIN
144	WIEDE	Wiest	WIFFA	WIFOH	WIGAT	WIGIR
150	WIEDO	WIETE	WIFFI	WIFOL	WIGAX	WIGIT
200	WIEFA	WIETO	WIFGA	WIFOM	WIGAZ	WIGIW
250	WIEFE	WIETU	WIFGI	WIFOP	WIGBA	WIGIZ

Quantity	Sizes 4" to 8"					
	4"	4 $\frac{1}{2}$ "	5"	6"	7"	8"
1	WIGJE	WIGUB	WIHIL	WIJAP	WIJIG	WIJRO
2	WIGJO	WIGUC	WIHIM	WIJAS	WIJIL	WIJRY
3	WIGKE	WIGUE	WIHIP	WIJAY	WIJIM	WIJSA
4	WIGKO	WIGUG	WIHIW	WIJBE	WIJIP	WIJSI
5	WIGKU	WIGUH	WIHOA	WIJBO	WIJIS	WIJSO
6	WIGLA	WIGUK	WIHOB	WIJBU	WIJKA	WIJTE
7	WIGLI	WIGUL	WIHOD	WIJCE	WIJKI	WIJTO
8	WIGME	WIGUM	WIHOE	WIJCO	WIJKO	WIJTU
9	WIGMO	WIGUP	WIHOH	WIJDA	WIJLA	WIJUD
10	WIGOB	WIGUS	WIHOK	WIJDI	WIJLE	WIJUE
12	WIGOC	WIGUZ	WIHON	WIJED	WIJLO	WIJUH
15	WIGOE	WIHAC	WIHOR	WIJEH	WIJLU	WIJUK
18	WIGOG	WIHAD	WIHOT	WIJEK	WIJMA	WIJUN
20	WIGOL	WIHAE	WIHOV	WIJEM	WIJMI	WIJUP
24	WIGOM	WIHAG	WIHOX	WIJEN	WIJNE	WIJUT
25	WIGOP	WIHAL	WIHOZ	WIJER	WIJNO	WIJUV
30	WIGOS	WIHAM	WIHUB	WIJET	WIJNU	WIJUX
36	WIGOW	WIHAP	WIHUD	WIJEV	WIJOA	WIJUY
40	WIGOX	WIHAS	WIHUE	WIJEX	WIJOC	WIKAC
48	WIGPE	WIHAT	WIHUG	WIJEZ	WIJOD	WIKAD
50	WIGPI	WIHAY	WIHUK	WIJFA	WIJOE	WIKAF
60	WIGPO	WIHED	WIHUN	WIJFE	WIJOH	WIKAH
70	WIGPU	WIHEH	WIHUR	WIJFO	WIJOK	WIKAL
72	WIGRE	WIHEJ	WIHUT	WIJFU	WIJON	WIKAM
80	WIGRO	WIHEK	WIHUW	WIJGE	WIJOR	WIKAP
84	WIGRU	WIHEN	WIHUX	WIJGO	WIJOT	WIKAS
90	WIGSE	WIHER	WIJAB	WIJGU	WIJOX	WIKAW
96	WIGSO	WIHET	WIJAC	WIJHA	WIJPA	WIKBE
100	WIGST	WIHEX	WIJAD	WIJHI	WIJPI	WIKBI
144	WIGTA	WIHEZ	WIJAF	WIJIB	WIJPU	WIKBO
150	WIGTE	WIHIA	WIJAH	WIJIC	WIJRA	WIKBU
200	WIGTI	WIHIC	WIJAL	WIJID	WIJRE	WIKCE
250	WIGTY	WIHIF	WIJAM	WIJIF	WIJRI	WIKCO

## SIZES, IN INCHES, OF VALVES, DISCS AND SHEET PACKING

Size	Code Word	Size	Code Word	Size	Code Word	Size	Code Word
1 $\frac{1}{64}$ "	UJAMU	3 $\frac{3}{4}$ "	UJAWI	4 $\frac{1}{2}$ "	UJEUL	16"	UJLOP
1 $\frac{1}{32}$ "	UJANA	1"	UJBED	5"	UJFEN	18"	UJLOS
1 $\frac{1}{16}$ "	UJANI	1 $\frac{1}{4}$ "	UJBOH	6"	UJGUD	20"	UJLOW
3 $\frac{1}{32}$ "	UJANS	1 $\frac{1}{2}$ "	UJBVC	7"	UJIAL	24"	UJLUB
1 $\frac{1}{8}$ "	UJAOD	2"	UJCOR	8"	UJIOD	30"	UJLUP
3 $\frac{1}{16}$ "	UJAOR	2 $\frac{1}{2}$ "	UJDEM	9"	UJJES	36"	UJLUS
1 $\frac{1}{4}$ "	UJAPA	3"	UJEAD	10"	UJKUF	48"	UJLYE
3 $\frac{1}{8}$ "	UJARL	3 $\frac{1}{2}$ "	UJEGS	12"	UJLOB	54"	UJLYG
1 $\frac{1}{2}$ "	UJATA	4"	UJENE	14"	UJLOF	60"	UJLYO



STYLE OF RADIATOR AND HOSE VALVES

Description	Code Word
Finished all over	ACBIU
Finished and nickel-plated all over	ACBIW
Rough body, finished trimmings	ACBOD
Rough body, nickel-plated all over	ACBOE
Rough body, nickel-plated trimmings	ACBOF

NUMERALS FOR  
QUANTITY, POUNDS, ORDER NUMBER

No.	Code Word	No.	Code Word	No.	Code Word	No.	Code Word
0	SLUNY	40	SLUWA	80	SLYOP	120	SOAMO
1	SLUOD	41	SLUWI	81	SLYOS	121	SOAMP
2	SLUOH	42	SLUXE	82	SLYOY	122	SOAMU
3	SLUOJ	43	SLUXO	83	SLYUC	123	SOANA
4	SLUOK	44	SLUYE	84	SLYUF	124	SOAND
5	SLUON	45	SLUYR	85	SLYUG	125	SOANI
6	SLUOR	46	SLUYT	86	SLYUL	130	SOAPH
7	SLUOV	47	SLUYU	87	SOABE	135	SOARI
8	SLUOX	48	SLUZA	88	SOABO	140	SOASO
9	SLUOZ	49	SLUZI	89	SOABU	145	SOATY
10	SLUPH	50	SLYAH	90	SOACH	150	SOAXE
11	SLUPI	51	SLYAJ	91	SOACO	155	SOAYI
12	SLUPT	52	SLYAK	92	SOACT	160	SOBAN
13	SLUPY	53	SLYAN	93	SOACU	165	SOBAZ
14	SLURB	54	SLYAR	94	SOADA	170	SOBDE
15	SLURC	55	SLYAT	95	SOADI	175	SOBEF
16	SLURF	56	SLYAV	96	SOADS	180	SOBEW
17	SLURI	57	SLYAX	97	SOADY	185	SOBGY
18	SLURL	58	SLYAZ	98	SOAFE	190	SOBIK
19	SLURM	59	SLYEB	99	SOAFO	195	SOBIZ
20	SLURS	60	SLYEF	100	SOAGE	200	SOBLI
21	SLURX	61	SLYEG	101	SOAGO	220	SOBTA
22	SLUSO	62	SLYEL	102	SOAGS	225	SOBUF
23	SLUSP	63	SLYEM	103	SOAGU	250	SOCEP
24	SLUST	64	SLYEP	104	SOAHA	275	SOCME
25	SLUSY	65	SLYES	105	SOAHI	300	SOCUP
26	SLUTA	66	SLYEW	106	SOAHT	350	SODOD
27	SLUTH	67	SLYID	107	SOAHY	400	SOEKS
28	SLUTI	68	SLYIJ	108	SOAJA	450	SOFAY
29	SLUTY	69	SLYIK	109	SOAJI	500	SOFOP
30	SLUUI	70	SLYIR	110	SOAKE	550	SOGIN
31	SLUUK	71	SLYIT	111	SOAKO	600	SOHCO
32	SLUUN	72	SLYIV	112	SOAKT	700	SOINI
33	SLUUR	73	SLYIX	113	SOAKU	800	SOJUK
34	SLUUT	74	SLYIZ	114	SOALD	900	SOLFI
35	SLUUV	75	SLYOB	115	SOALG	1000	SOMOC
36	SLUUX	76	SLYOC	116	SOALK	2000	SOMOD
37	SLUUZ	77	SLYOF	117	SOALO	3000	SOMOH
38	SLUVA	78	SLYOG	118	SOALT	4000	SOMOK
39	SLUVI	79	SLYOL	119	SOALU	5000	SOMON

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## GASKETS, VALVE DISCS, PUMP VALVES

Description	Code Word
Aluminum disc.....	ACAPY
Bakelite disc.....	ACARC
Bronze disc.....	ACARD
Composition disc.....	ACARG
Copper disc.....	ACARO
Double disc.....	ACART
Iron disc.....	ACARU
Jenkins disc.....	ACARY
Lead disc.....	ACASA
Leather disc.....	ACASB
Monel disc.....	ACASI
Wearesist disc.....	ACAXJ
Wearesist disc and seat ring.....	ACAXK
No. 15 Compound disc.....	ACASW
No. 30 Compound disc.....	ACASY
No. 80-A Compound disc.....	ACATB
No. 88 Compound disc.....	ACATE
No. 93 Compound disc.....	ACATH
No. 94 Compound disc.....	ACATI
No. 110 Compound disc.....	ACATO
No. 110-H Compound disc.....	ACATS
No. 119 Compound disc.....	ACATU
No. 119-A Compound disc.....	ACATY
No. 165 Compound disc.....	ACAUA
No. 800 Compound disc.....	ACAUF
No. 808 Compound disc.....	ACAUG
No. 936 Compound disc.....	ACAUJ
No. 936-A Compound disc.....	ACAUP
No. 946 Compound disc.....	ACAUK
No. 946-A Compound disc.....	ACAUR
No. 1120 Compound disc.....	ACAUM
Rubber disc.....	ACAVY
Steel disc.....	ACAXA
White metal disc.....	ACAXO
Full-face gaskets, Asbestos, Standard.....	ACBYK
Full-face gaskets, Asbestos, Extra Heavy.....	ACBYL
Full-face gaskets, Jenarco, Standard.....	ACBYM
Full-face gaskets, Jenarco, Extra Heavy.....	ACBYO
Full-face gaskets, Jenkins '96 Standard.....	ACBYP
Full-face gaskets, Jenkins '96, Extra Heavy.....	ACBYR
Full-face gaskets, Oiltite, Standard.....	ACCAC
Full-face gaskets, Oiltite, Extra Heavy.....	ACCAD
Manhole gaskets.....	ACCAK
Ring gaskets, Standard.....	ACCAV
Ring gaskets, Extra Heavy.....	ACCAW
Ring gaskets, Asbestos, Standard.....	ACCAX
Ring gaskets, Asbestos, Extra Heavy.....	ACCAY
Ring gaskets, Jenarco, Standard.....	ACCAZ
Ring gaskets, Jenarco, Extra Heavy.....	ACCEA
Ring gaskets, Jenkins '96, Standard.....	ACCEB
Ring gaskets, Jenkins '96, Extra Heavy.....	ACCEC
Ring gaskets, Oiltite, Standard.....	ACCEG
Ring gaskets, Oiltite, Extra Heavy.....	ACCEH
Pump Valves, No. 15, Compound.....	ACMIT
Pump Valves, No. 30, Compound.....	ACMIV
Pump Valves, No. 80, Compound.....	ACMIX
Pump Valves, No. 88, Compound.....	ACMIZ
Pump Valves, No. 93, Compound.....	ACMOA
Pump Valves, No. 94, Compound.....	ACMOB
Pump Valves, No. 936, Compound.....	ACMOX
Pump Valves, No. 946, Compound.....	ACMOY



SHEET PACKING

Brand	Code Word
Asbestos sheet.....	ACDOL
Jenarco.....	ACDOY
Jenarco, wire inserted.....	ACDOZ
Jenkins '96.....	ACDUA
Jenkins '96, wire inserted.....	ACDUB
Oiltite.....	ACDUG
Oiltite, wire inserted.....	ACDUH

TECHNICAL DESCRIPTION OF VALVES

Description	Code Word
Bolted bonnet.....	ACAHA
One-piece screw-in bonnet.....	ACAHS
One-piece screw-over bonnet.....	ACAHU
Screwed bonnet.....	ACAHY
Union bonnet.....	ACAIB
Bronze disc holder.....	ACAXU
Complete disc holder.....	ACAYA
Complete disc holder less disc.....	ACAYC
Complete disc holder with side plugs and pins.....	ACAYE
Disc holder, solid.....	ACAYO
Iron disc holder.....	ACAYR
Slip-on, stay-on disc holder.....	ACAYT
American standard drilling.....	ACAZA
Extra heavy drilling.....	ACAZE
Special drilling.....	ACAZO
Hose end with cap and chain.....	ACBAX
Hub end.....	ACBAY
Hub one end, other flanged.....	ACBAZ
Hub one end, other screwed.....	ACBEA
Flanges bolted on.....	ACBUF
Flanges drilled.....	ACBUG
Flanges drilled, bolts and nuts.....	ACBUJ
Flanges faced and drilled.....	ACBUO
Lever handle.....	ACCIT
Tee handle.....	ACCIV
Wheel handle.....	ACCIW
Screwed inlet, flanged outlet.....	ACCOZ
Screwed inlet, hose outlet.....	ACCUA
Screwed inlet, threaded (for).....	ACCUB
Screwed inlet with cap and chain.....	ACCUC
Bronze mounted.....	ACDAD
Composition mounted.....	ACDAE
Iron mounted.....	ACDAF
Monel mounted.....	ACDAG
Stainless iron mounted.....	ACDAJ
Stainless steel mounted.....	ACDAK
Open to left.....	ACDIN
Open to right.....	ACDIO
Flanged outlet, screwed inlet.....	ACDOB
Flanged outlet, union inlet.....	ACDOC
Screwed outlet, flanged inlet.....	ACDOJ
Interchangeable parts.....	ACDUX
Seat ring (pair).....	ACEHU
Seat ring, bronze.....	ACEHY
Seat ring, iron.....	ACEIA
Seat ring, monel.....	ACEIB
Seat ring, Wearesist.....	ACEML
Seat ring, renewable.....	ACEIH

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## TECHNICAL DESCRIPTION OF VALVES—Continued

Description	Code Word
Non-rising.....	ACEKE
Non-rising, bevel gears.....	ACEKI
Non-rising, mitre gears.....	ACEKO
Non-rising, spur gears.....	ACEKT
Non-rising, worm gears.....	ACEKU
Outside screw and yoke, bevel gears.....	ACELG
Outside screw and yoke, mitre gears.....	ACELI
Outside screw and yoke, spur gears.....	ACELK
Outside screw and yoke, worm gears.....	ACELO
Bevel seat.....	ACEMC
Crowned seat.....	ACEME
Flat seat.....	ACEMF
Parallel seat.....	ACEMG
Taper seat.....	ACEMS
Rising spindle.....	ACEOB
Non-rising spindle.....	ACEOD
Lower spreader.....	ACEOJ
Upper spreader.....	ACEOK
Phosphor bronze spring (for fig. ———).....	ACEOP
Quick-opening thread.....	ACESO
British (Whitworth) Standard thread.....	ACETO
American Standard thread.....	ACETI
Briggs U. S. Standard thread.....	ACETM
City of ——— standard hose thread.....	ACETX
Double disc wedge.....	ACEYE
Solid wedge.....	ACEYH
Bronze wheel.....	ACEYS
Composition wheel with nickel-plated top plate.....	ACEZT
Hand wheel marked "open".....	ACFAC
Malleable iron wheel.....	ACFAE
Sprocket wheel.....	ACFAJ
Coloured wheel.....	ABWNE



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84	ABTOX	139	145	ABUAN	122	224	ABULE	215	314	ABUYR	21
85	ABTPA	139	146	ABUAO	122	226	ABULG	221	315	ABUYT	21
86	ABTPI	139	151	ABUAX	136	227	ABULI	217	316-A	ABUZA	50
101	ABTSH	212	152	ABUAZ	136	228	ABULK	221	317-A	ABUZE	50
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107	ABTUC	18	153-B	ABUBT	136	255	ABUPG	172	336	ABVAU	148
107-A	ABTUD	16	156	ABUCB	150	256	ABUPI	206	337	ABVAW	148
108	ABTUF	18	162	ABUCO	129	257	ABUPO	207	338	ABVAZ	145
108-A	ABTUG	16	162-A	ABUCR	129	260	ABUPU	56	339	ABVBG	145
108A-S	ABTUGS	20	163	ABUCT	129	262	ABURG	56	340	ABVBK	129
109	ABTUH	18	163-A	ABUCU	129	265	ABURN	138	341	ABVBM	129
109-A	ABTUJ	16	164	ABUDA	131	266	ABURO	138	344	ABVBT	24
110	ABTUK	18	164-A	ABUDC	131	267	ABURT	138	345	ABVBY	204
110-A	ABTUL	16	164-B	ABUDF	131	268	ABURV	138	355	ABVCU	106
111	ABTUM	18	164-C	ABUDK	131	269	ABURY	213	357	ABVCY	39
111-A	ABTUR	16	165	ABUDM	30	270	ABUSA	108	380	ABVGO	194
112	ABTUS	22	166	ABUDS	30	271	ABUSF	108	381	ABVGY	194
113	ABTUV	22	167	ABUDV	30	275	ABUST	110	382	ABVHF	195
114	ABTUX	22	168	ABUDY	30	276	ABUTE	110	383	ABVHK	195
114-A	ABTUY	22	169	ABUEB	31	277	ABUTH	174	386	ABVHU	192
117	ABTVI	52	169-G	ABUED	31	280	ABUTY	112	387	ABVIA	192
117-A	ABTVO	50	170	ABUEF	31	281	ABUUB	112	388	ABVIE	193
117A-S	ABTVOS	54	170-G	ABUEG	31	282	ABUUC	114	389	ABVIJ	193
118	ABTVY	52	171	ABUEH	27	283	ABUUF	114	390	ABVIN	202
118-A	ABTWB	50	173	ABUEN	34	285	ABUUL	180	391	ABVIO	203
119	ABTWC	52	173-A	ABUEP	34	288	ABUUS	128	392	ABVIR	202
120	ABTWD	52	174	ABUER	32	289	ABUVA	128	393	ABVIT	203
120-A	ABTWG	52	175	ABUES	32	296	ABUWE	146	394	ABVIV	202
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403	ABVJO	160	480	ABVRW	168	554	ABVZA	196	685	ABWKM	222
404	ABVJR	160	481	ABVRY	57	555	ABVZC	196	691	ABWKZ	216
405	ABVJS	167	482	ABVSA	144	560	ABVZM	190	707	ABWMO	101
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412	ABVKG	157	488	ABVSL	37	587	ABWAY	140	741	ABWRI	81
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421	ABVLD	169	492	ABVST	27	599	ABWCU	188	822	ABWZH	163
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426	ABVLO	70	497	ABVTG	26	610	ABWED	46	874	ABXEA	184
427	ABVLR	70	498	ABVTI	27	610-E	ABWDJ	46	875	ABXEB	184
428	ABVLU	70	499	ABVTK	90	610-F	ABWDK	46	876	ABXEC	186
429	ABVLW	70	499-D	ABVTL	90	610-G	ABWDL	46	877	ABXED	186
430	ABVLY	70	500	ABVTM	76	611	ABWEG	47	878	ABXEF	187
431	ABVMA	151	501	ABVTO	76	611-E	ABWEE	47	879	ABXEG	187
432	ABVMC	151	502	ABVTR	76	611-F	ABWEF	47	880	ABXEH	58
438	ABVMP	72	503	ABVTU	76	611-G	ABWEI	47	881	ABXEJ	59
440	ABVMV	72	504	ABVTY	76	630	ABWFM	48	882	ABXEL	59
441	ABVMX	198	505	ABVUA	76	631	ABWFO	48	941	ABXIU	48
442	ABVND	198	508	ABVUD	82	632	ABWFR	48	942	ABXIV	48
443	ABVNF	84	509	ABVUE	82	633	ABWFT	48	943	ABXIW	48
444	ABVNH	84	512	ABVUH	89	634	ABWFO	125	944	ABXIX	48
445	ABVNJ	84	513	ABVUJ	78	635	ABWFX	125			
446	ABVNL	84	515	ABVUL	78	636	ABWFZ	125			
447	ABVNP	85	516	ABVUM	87	637	ABWGA	125			
448	ABVNR	85	518	ABVUP	88	642	ABWGM	132			
449	ABVNT	86	519	ABVUR	88	643	ABWGO	132			
450	ABVNU	86	520	ABVUS	88	644	ABWGR	132			
460	ABVOP	74	521	ABVUT	88	645	ABWGT	132			
461	ABVOS	74	530	ABVWO	79	648	ABWGZ	213			
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463	ABVOW	74	532	ABVWY	79	658-A	ABWIG	60			
464	ABVOY	75	533	ABVXA	79	659	ABWIH	205			
465	ABVPA	75	534	ABVXE	80	660	ABWIJ	23			
466	ABVPE	75	535	ABVXI	80	661	ABWIK	23			
467	ABVPI	75	536	ABVXL	80	662	ABWIM	23			
470	ABVPY	99	537	ABVXO	80	663	ABWIO	23			
471	ABVRC	99	540	ABVXU	135	674	ABWJN	107			
475	ABVRK	55	541	ABVXY	135	675	ABWJP	107			



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## 125 Lb. Cast Iron Companion Flanges Dimensions, Inches

Nominal Pipe Size	Diameter of Flange	Thickness of Flange (Min.)	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts	Diameter of Drilled Bolt Holes	Length of Bolts	Size of Ring Gasket
1	4 $\frac{1}{4}$	$\frac{7}{16}$	3 $\frac{1}{8}$	4	$\frac{1}{2}$	$\frac{5}{8}$	1 $\frac{1}{2}$	1 $\times$ 2 $\frac{5}{8}$
1 $\frac{1}{4}$	4 $\frac{5}{8}$	$\frac{1}{2}$	3 $\frac{1}{2}$	4	$\frac{1}{2}$	$\frac{5}{8}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$ $\times$ 3
1 $\frac{1}{2}$	5	$\frac{9}{16}$	3 $\frac{7}{8}$	4	$\frac{1}{2}$	$\frac{5}{8}$	1 $\frac{3}{4}$	1 $\frac{1}{2}$ $\times$ 3 $\frac{3}{8}$
2	6	$\frac{5}{8}$	4 $\frac{3}{4}$	4	$\frac{5}{8}$	$\frac{3}{4}$	2	2 $\times$ 4 $\frac{1}{8}$
2 $\frac{1}{2}$	7	$\frac{11}{16}$	5 $\frac{1}{2}$	4	$\frac{5}{8}$	$\frac{3}{4}$	2 $\frac{1}{4}$	2 $\frac{1}{2}$ $\times$ 4 $\frac{7}{8}$
3	7 $\frac{1}{2}$	$\frac{3}{4}$	6	4	$\frac{5}{8}$	$\frac{3}{4}$	2 $\frac{1}{4}$	3 $\times$ 5 $\frac{3}{8}$
3 $\frac{1}{2}$	8 $\frac{1}{2}$	$\frac{13}{16}$	7	8	$\frac{5}{8}$	$\frac{3}{4}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$ $\times$ 6 $\frac{3}{8}$
4	9	$\frac{15}{16}$	7 $\frac{1}{2}$	8	$\frac{5}{8}$	$\frac{3}{4}$	2 $\frac{3}{4}$	4 $\times$ 6 $\frac{7}{8}$
5	10	$\frac{15}{16}$	8 $\frac{1}{2}$	8	$\frac{3}{4}$	$\frac{7}{8}$	2 $\frac{3}{4}$	5 $\times$ 7 $\frac{3}{4}$
6	11	1	9 $\frac{1}{2}$	8	$\frac{3}{4}$	$\frac{7}{8}$	3	6 $\times$ 8 $\frac{3}{4}$
8	13 $\frac{1}{2}$	1 $\frac{1}{8}$	11 $\frac{3}{4}$	8	$\frac{3}{4}$	$\frac{7}{8}$	3 $\frac{1}{4}$	8 $\times$ 11
10	16	$\frac{13}{16}$	14 $\frac{1}{4}$	12	$\frac{7}{8}$	1	3 $\frac{1}{2}$	10 $\times$ 13 $\frac{3}{8}$
12	19	1 $\frac{1}{4}$	17	12	$\frac{7}{8}$	1	3 $\frac{1}{2}$	12 $\times$ 16 $\frac{1}{8}$
14	21	1 $\frac{3}{8}$	18 $\frac{3}{4}$	12	1	1 $\frac{1}{8}$	4	14 $\times$ 17 $\frac{3}{4}$
16	23 $\frac{1}{2}$	$\frac{17}{16}$	21 $\frac{1}{4}$	16	1	1 $\frac{1}{8}$	4 $\frac{1}{4}$	16 $\times$ 20 $\frac{1}{4}$
18	25	$\frac{19}{16}$	22 $\frac{3}{4}$	16	1 $\frac{1}{8}$	1 $\frac{1}{4}$	4 $\frac{1}{2}$	18 $\times$ 21 $\frac{5}{8}$
20	27 $\frac{1}{2}$	1 $\frac{11}{16}$	25	20	1 $\frac{1}{8}$	1 $\frac{1}{4}$	4 $\frac{3}{4}$	20 $\times$ 23 $\frac{7}{8}$
24	32	1 $\frac{7}{8}$	29 $\frac{1}{2}$	20	1 $\frac{1}{4}$	1 $\frac{3}{8}$	5 $\frac{1}{4}$	24 $\times$ 28 $\frac{1}{4}$
30	38 $\frac{3}{4}$	2 $\frac{1}{8}$	36	28	1 $\frac{1}{4}$	1 $\frac{3}{8}$	5 $\frac{3}{4}$	30 $\times$ 34 $\frac{3}{4}$
36	46	2 $\frac{3}{8}$	42 $\frac{3}{4}$	32	1 $\frac{1}{2}$	1 $\frac{5}{8}$	6 $\frac{1}{2}$	36 $\times$ 41 $\frac{1}{4}$
42	53	2 $\frac{5}{8}$	49 $\frac{1}{2}$	36	1 $\frac{1}{2}$	1 $\frac{5}{8}$	7 $\frac{1}{4}$	42 $\times$ 48
48	59 $\frac{1}{2}$	2 $\frac{3}{4}$	56	44	1 $\frac{1}{2}$	1 $\frac{5}{8}$	7 $\frac{1}{2}$	48 $\times$ 54 $\frac{1}{2}$
54	66 $\frac{1}{4}$	3	62 $\frac{3}{4}$	44	1 $\frac{3}{4}$	2	8	54 $\times$ 61
60	73	3 $\frac{1}{8}$	69 $\frac{1}{4}$	52	1 $\frac{3}{4}$	2	8 $\frac{1}{4}$	60 $\times$ 67 $\frac{1}{2}$
72	86 $\frac{1}{2}$	3 $\frac{1}{2}$	82 $\frac{1}{2}$	60	1 $\frac{3}{4}$	2	9	72 $\times$ 80 $\frac{3}{4}$

125 lb. cast iron standard flanges have plain face.

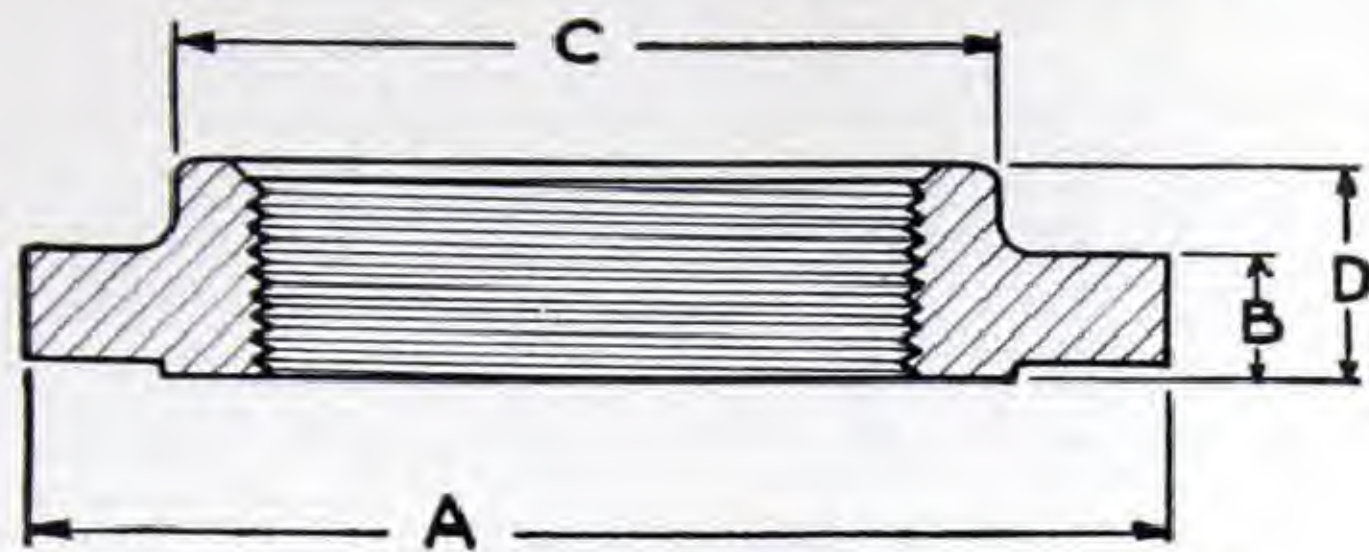
## 250 Lb. Cast Iron Companion Flanges Dimensions, Inches

Nominal Pipe Size	Diameter of Flange	Thickness of Flange (Min.)	Diameter of Raised Face	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts	Diameter of Drilled Bolt Holes	Length of Bolts	Size of Ring Gasket
1	4 $\frac{7}{8}$	$\frac{11}{16}$	2 $\frac{11}{16}$	3 $\frac{1}{2}$	4	$\frac{5}{8}$	$\frac{3}{4}$	2 $\frac{1}{4}$	1 $\times$ 2 $\frac{7}{8}$
1 $\frac{1}{4}$	5 $\frac{1}{4}$	$\frac{3}{4}$	3 $\frac{1}{16}$	3 $\frac{7}{8}$	4	$\frac{5}{8}$	$\frac{3}{4}$	2 $\frac{1}{2}$	1 $\frac{1}{4}$ $\times$ 3 $\frac{1}{4}$
1 $\frac{1}{2}$	6 $\frac{1}{8}$	$\frac{13}{16}$	3 $\frac{9}{16}$	4 $\frac{1}{2}$	4	$\frac{3}{4}$	$\frac{7}{8}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$ $\times$ 3 $\frac{3}{4}$
2	6 $\frac{1}{2}$	$\frac{7}{8}$	4 $\frac{3}{16}$	5	8	$\frac{5}{8}$	$\frac{3}{4}$	2 $\frac{1}{2}$	2 $\times$ 4 $\frac{3}{8}$
2 $\frac{1}{2}$	7 $\frac{1}{2}$	1	4 $\frac{15}{16}$	5 $\frac{7}{8}$	8	$\frac{3}{4}$	$\frac{7}{8}$	3	2 $\frac{1}{2}$ $\times$ 5 $\frac{1}{8}$
3	8 $\frac{1}{4}$	1 $\frac{1}{8}$	5 $\frac{11}{16}$	6 $\frac{5}{8}$	8	$\frac{3}{4}$	$\frac{7}{8}$	3 $\frac{1}{4}$	3 $\times$ 5 $\frac{7}{8}$
3 $\frac{1}{2}$	9	1 $\frac{3}{16}$	6 $\frac{5}{16}$	7 $\frac{1}{4}$	8	$\frac{3}{4}$	$\frac{7}{8}$	3 $\frac{1}{4}$	3 $\frac{1}{2}$ $\times$ 6 $\frac{1}{2}$
4	10	1 $\frac{1}{4}$	6 $\frac{15}{16}$	7 $\frac{7}{8}$	8	$\frac{3}{4}$	$\frac{7}{8}$	3 $\frac{1}{2}$	4 $\times$ 7 $\frac{1}{8}$
5	11	1 $\frac{3}{8}$	8 $\frac{5}{16}$	9 $\frac{1}{4}$	8	$\frac{3}{4}$	$\frac{7}{8}$	3 $\frac{3}{4}$	5 $\times$ 8 $\frac{1}{2}$
6	12 $\frac{1}{2}$	1 $\frac{7}{16}$	9 $\frac{11}{16}$	10 $\frac{5}{8}$	12	$\frac{3}{4}$	$\frac{7}{8}$	3 $\frac{3}{4}$	6 $\times$ 9 $\frac{7}{8}$
8	15	1 $\frac{5}{8}$	11 $\frac{15}{16}$	13	12	$\frac{7}{8}$	1	4 $\frac{1}{4}$	8 $\times$ 12 $\frac{1}{8}$
10	17 $\frac{1}{2}$	1 $\frac{7}{8}$	14 $\frac{1}{16}$	15 $\frac{1}{4}$	16	1	1 $\frac{1}{8}$	5	10 $\times$ 14 $\frac{1}{4}$
12	20 $\frac{1}{2}$	2	16 $\frac{7}{16}$	17 $\frac{3}{4}$	16	1 $\frac{1}{8}$	1 $\frac{1}{4}$	5 $\frac{1}{2}$	12 $\times$ 16 $\frac{3}{8}$
14 O.D.	23	2 $\frac{1}{8}$	18 $\frac{15}{16}$	20 $\frac{1}{4}$	20	1 $\frac{1}{8}$	1 $\frac{1}{4}$	5 $\frac{3}{4}$	13 $\frac{1}{4}$ $\times$ 19 $\frac{1}{8}$
16 O.D.	25 $\frac{1}{2}$	2 $\frac{1}{4}$	21 $\frac{1}{16}$	22 $\frac{1}{2}$	20	1 $\frac{1}{4}$	1 $\frac{3}{8}$	6	15 $\frac{1}{4}$ $\times$ 21 $\frac{1}{4}$
18 O.D.	28	2 $\frac{3}{8}$	23 $\frac{5}{16}$	24 $\frac{3}{4}$	24	1 $\frac{1}{4}$	1 $\frac{3}{8}$	6 $\frac{1}{4}$	17 $\times$ 23 $\frac{1}{2}$
20 O.D.	30 $\frac{1}{2}$	2 $\frac{1}{2}$	25 $\frac{9}{16}$	27	24	1 $\frac{1}{4}$	1 $\frac{3}{8}$	6 $\frac{1}{2}$	19 $\times$ 25 $\frac{3}{4}$
24 O.D.	36	2 $\frac{3}{4}$	30 $\frac{5}{16}$	32	24	1 $\frac{1}{2}$	1 $\frac{5}{8}$	7 $\frac{1}{2}$	23 $\times$ 30 $\frac{1}{2}$
30 O.D.	43	3	37 $\frac{3}{16}$	39 $\frac{1}{4}$	28	1 $\frac{3}{4}$	2	8 $\frac{1}{4}$	29 $\times$ 37 $\frac{1}{2}$
36 O.D.	50	3 $\frac{3}{8}$	43 $\frac{11}{16}$	46	32	2	2 $\frac{1}{4}$	9 $\frac{1}{4}$	34 $\frac{1}{2}$ $\times$ 44
42 O.D.	57	3 $\frac{11}{16}$	50 $\frac{7}{16}$	52 $\frac{3}{4}$	36	2	2 $\frac{1}{4}$	9 $\frac{3}{4}$	40 $\frac{1}{4}$ $\times$ 50 $\frac{3}{4}$
48 O.D.	65	4	58 $\frac{7}{16}$	60 $\frac{3}{4}$	40	2	2 $\frac{1}{4}$	10 $\frac{1}{2}$	46 $\times$ 58 $\frac{3}{4}$

250 lb. cast iron standard flanges have a  $\frac{1}{16}$ " raised face. This is included in the face to face, centre to face and thickness of flange dimensions.



Steel Companion Flanges



Series 15

For Maximum Steam Service Pressures of 150 Lb. per Sq. In. (Gauge) at a Temperature of 500° F and 100 Lb. per Sq. In. (Gauge) at 750° F.

Dimensions, Inches

Nominal Pipe Size	A Diameter of Flange	B Thickness of Flange Min.	C Diameter of Hub	D Length Through Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts
1	4 1/4	7/16	1 15/16	1 1/16	3 1/8	4	1/2
1 1/4	4 5/8	1/2	2 5/16	1 3/16	3 1/2	4	1/2
1 1/2	5	9/16	2 9/16	7/8	3 7/8	4	1/2
2	6	5/8	3 1/16	1	4 3/4	4	5/8
2 1/2	7	11/16	3 9/16	1 1/8	5 1/2	4	5/8
3	7 1/2	3/4	4 1/4	1 3/16	6	4	5/8
3 1/2	8 1/2	13/16	4 13/16	1 1/4	7	8	5/8
4	9	15/16	5 5/16	1 5/16	7 1/2	8	5/8
5	10	15/16	6 7/16	1 7/16	8 1/2	8	3/4
6	11	1	7 9/16	1 9/16	9 1/2	8	3/4
8	13 1/2	1 1/8	9 11/16	1 3/4	11 3/4	8	3/4
10	16	1 3/16	12	1 15/16	14 1/4	12	7/8
12	19	1 1/4	14 3/8	2 3/16	17	12	7/8
14 O.D.	21	1 3/8	15 3/4	2 1/4	18 3/4	12	1
16 O.D.	23 1/2	1 7/16	18	2 1/2	21 1/4	16	1
18 O.D.	25	1 9/16	19 7/8	2 11/16	22 3/4	16	1 1/8
20 O.D.	27 1/2	1 11/16	22	2 7/8	25	20	1 1/8
24 O.D.	32	1 7/8	26 1/8	3 1/4	29 1/2	20	1 1/4

A raised face of 1/16 inch is included in thickness of flange minimum.

Series 30

For Maximum Steam Service Pressure of 300 Lb. per Sq. In. (Gauge) at a Temperature of 750° F.

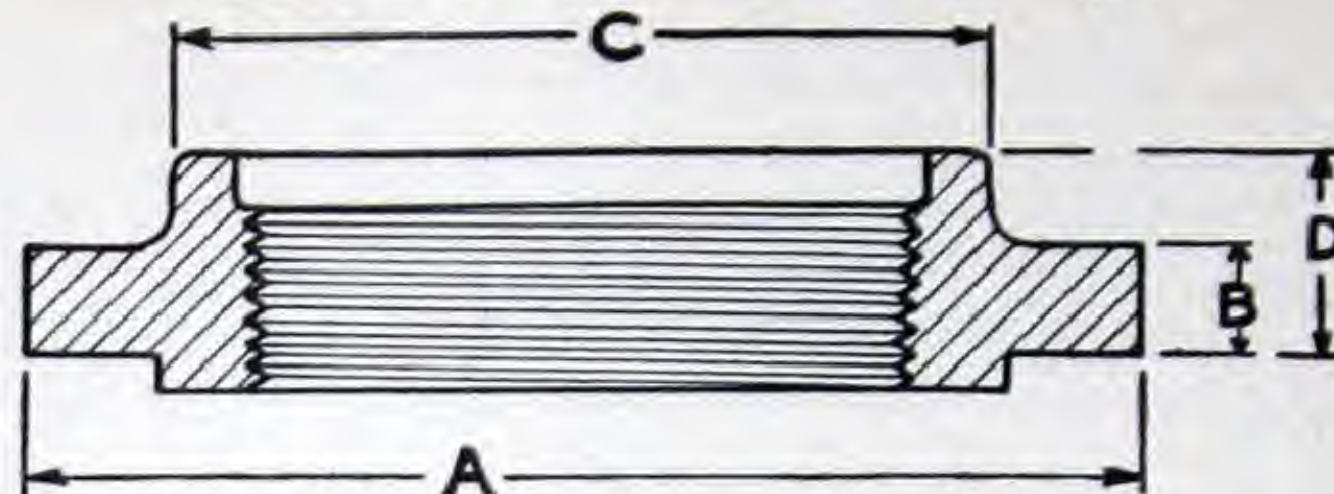
Dimensions, Inches

Nominal Pipe Size	A Diameter of Flange	B Thickness of Flange Min.	C Diameter of Hub	D Length Through Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts
2	6 1/2	7/8	3 5/16	1 5/16	5	8	5/8
2 1/2	7 1/2	1	3 15/16	1 1/2	5 7/8	8	3/4
3	8 1/4	1 1/8	4 5/8	1 11/16	6 5/8	8	3/4
3 1/2	9	1 3/16	5 1/4	1 3/4	7 1/4	8	3/4
4	10	1 1/4	5 3/4	1 7/8	7 7/8	8	3/4
5	11	1 3/8	7	2	9 1/4	8	3/4
6	12 1/2	1 7/16	8 1/8	2 1/16	10 5/8	12	3/4
8	15	1 5/8	10 1/4	2 7/16	13	12	7/8
10	17 1/2	1 7/8	12 5/8	2 5/8	15 1/4	16	1
12	20 1/2	2	14 3/4	2 7/8	17 3/4	16	1 1/8
14 O.D.	23	2 1/8	16 3/4	3	20 1/4	20	1 1/8
16 O.D.	25 1/2	2 1/4	19	3 1/4	22 1/2	20	1 1/4
18 O.D.	28	2 3/8	21	3 1/2	24 3/4	24	1 1/4
20 O.D.	30 1/2	2 1/2	23 1/8	3 3/4	27	24	1 1/4
24 O.D.	36	2 3/4	27 5/8	4 3/16	32	24	1 1/2

A raised face of 1/16 inch is included in thickness of flange minimum. For sizes below 2 inches, use the dimensions of 600 lb. flanges.



## Steel Companion Flanges



### Series 40

For Maximum Steam Service Pressure of 400 Lb. per Sq. In. (Gauge)  
at a Temperature of 750°F.

Dimensions, Inches

Nominal Pipe Size	A Diameter of Flange	B Thickness of Flange Min.	C Diameter of Hub	D Length Through Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts
4	10	1 <sup>3</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>4</sub>	2	7 <sup>7</sup> / <sub>8</sub>	8	<sup>7</sup> / <sub>8</sub>
5	11	1 <sup>1</sup> / <sub>2</sub>	7	2 <sup>1</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>4</sub>	8	<sup>7</sup> / <sub>8</sub>
6	12 <sup>1</sup> / <sub>2</sub>	1 <sup>5</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>4</sub>	10 <sup>5</sup> / <sub>8</sub>	12	<sup>7</sup> / <sub>8</sub>
8	15	1 <sup>7</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>4</sub>	2 <sup>11</sup> / <sub>16</sub>	13	12	1
10	17 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>8</sub>	12 <sup>5</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>8</sub>	15 <sup>1</sup> / <sub>4</sub>	16	1 <sup>1</sup> / <sub>8</sub>
12	20 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	14 <sup>3</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>8</sub>	17 <sup>3</sup> / <sub>4</sub>	16	1 <sup>1</sup> / <sub>4</sub>
14 O.D.	23	2 <sup>3</sup> / <sub>8</sub>	16 <sup>3</sup> / <sub>4</sub>	....	20 <sup>1</sup> / <sub>4</sub>	20	1 <sup>1</sup> / <sub>4</sub>
16 O.D.	25 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	19	....	22 <sup>1</sup> / <sub>2</sub>	20	1 <sup>3</sup> / <sub>8</sub>
18 O.D.	28	2 <sup>5</sup> / <sub>8</sub>	21	....	24 <sup>3</sup> / <sub>4</sub>	24	1 <sup>3</sup> / <sub>8</sub>
20 O.D.	30 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>	23 <sup>1</sup> / <sub>8</sub>	....	27	24	1 <sup>1</sup> / <sub>2</sub>
24 O.D.	36	3	27 <sup>5</sup> / <sub>8</sub>	....	32	24	1 <sup>3</sup> / <sub>4</sub>

Thickness of raised face is not included in thickness of flange minimum. For sizes below 4 inches use the dimensions of the 600 lb. flanges.

### Series 60

For Maximum Steam Service Pressure of 600 Lb. per Sq. In. (Gauge)  
at a Temperature of 750°F.

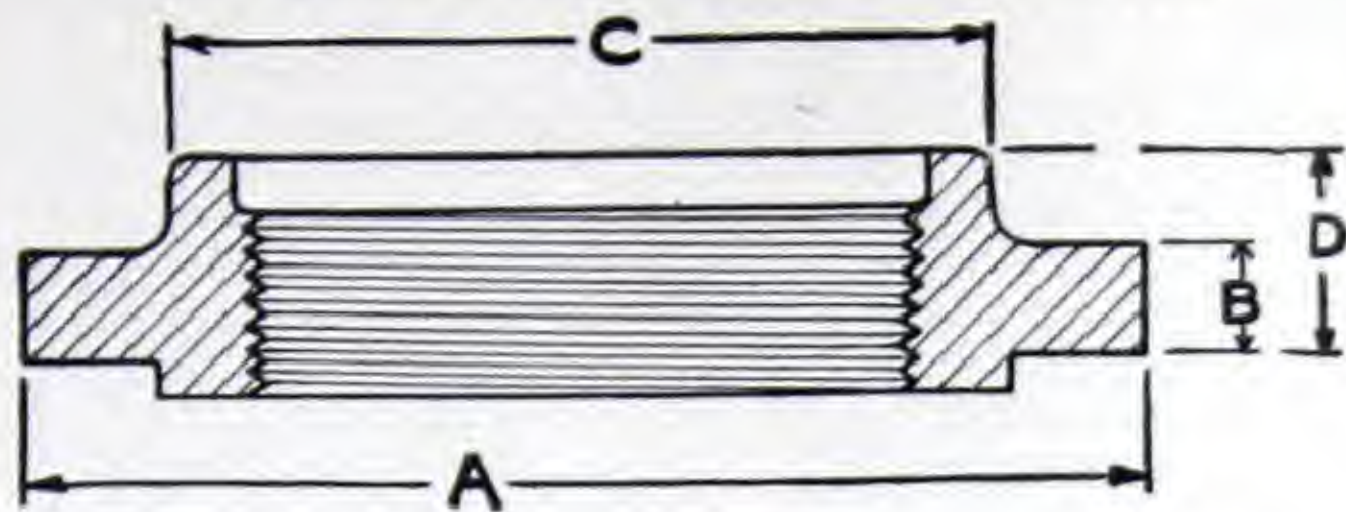
Dimensions, Inches

Nominal Pipe Size	A Diameter of Flange	B Thickness of Flange Min.	C Diameter of Hub	D Length Through Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts
<sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	<sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>2</sub>	<sup>7</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	4	<sup>1</sup> / <sub>2</sub>
<sup>3</sup> / <sub>4</sub>	4 <sup>5</sup> / <sub>8</sub>	<sup>5</sup> / <sub>8</sub>	1 <sup>7</sup> / <sub>8</sub>	1	3 <sup>1</sup> / <sub>4</sub>	4	<sup>5</sup> / <sub>8</sub>
1	4 <sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>2</sub>	4	<sup>5</sup> / <sub>8</sub>
1 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>	4	<sup>5</sup> / <sub>8</sub>
1 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>8</sub>	<sup>7</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	4	<sup>3</sup> / <sub>4</sub>
2	6 <sup>1</sup> / <sub>2</sub>	1	3 <sup>5</sup> / <sub>16</sub>	1 <sup>7</sup> / <sub>16</sub>	5	8	<sup>5</sup> / <sub>8</sub>
2 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>8</sub>	3 <sup>15</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	5 <sup>7</sup> / <sub>8</sub>	8	<sup>3</sup> / <sub>4</sub>
3	8 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	4 <sup>5</sup> / <sub>8</sub>	1 <sup>13</sup> / <sub>16</sub>	6 <sup>5</sup> / <sub>8</sub>	8	<sup>3</sup> / <sub>4</sub>
3 <sup>1</sup> / <sub>2</sub>	9	1 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	1 <sup>15</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	8	<sup>7</sup> / <sub>8</sub>
4	10 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	6	2 <sup>1</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>2</sub>	8	<sup>7</sup> / <sub>8</sub>
5	13	1 <sup>3</sup> / <sub>4</sub>	7 <sup>7</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	8	1
6	14	1 <sup>7</sup> / <sub>8</sub>	8 <sup>3</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	12	1
8	16 <sup>1</sup> / <sub>2</sub>	2 <sup>5</sup> / <sub>16</sub>	10 <sup>3</sup> / <sub>4</sub>	3	13 <sup>3</sup> / <sub>4</sub>	12	1 <sup>1</sup> / <sub>8</sub>
10	20	2 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>8</sub>	17	16	1 <sup>1</sup> / <sub>4</sub>
12	22	2 <sup>5</sup> / <sub>8</sub>	15 <sup>3</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>8</sub>	19 <sup>1</sup> / <sub>4</sub>	20	1 <sup>1</sup> / <sub>4</sub>
14 O.D.	23 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	17	....	20 <sup>3</sup> / <sub>4</sub>	20	1 <sup>3</sup> / <sub>8</sub>
16 O.D.	27	3	19 <sup>1</sup> / <sub>2</sub>	....	23 <sup>3</sup> / <sub>4</sub>	20	1 <sup>1</sup> / <sub>2</sub>
18 O.D.	29 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>4</sub>	21 <sup>1</sup> / <sub>2</sub>	....	25 <sup>3</sup> / <sub>4</sub>	20	1 <sup>5</sup> / <sub>8</sub>
20 O.D.	32	3 <sup>1</sup> / <sub>2</sub>	24	....	28 <sup>1</sup> / <sub>2</sub>	24	1 <sup>5</sup> / <sub>8</sub>
24 O.D.	37	4	28 <sup>1</sup> / <sub>4</sub>	....	33	24	1 <sup>7</sup> / <sub>8</sub>

Thickness of raised face is not included in thickness of flange minimum.



Steel Companion Flanges



Series 90

For Maximum Steam Service Pressure of 900 Lb. per Sq. In. (Gauge)  
at a Temperature of 750°F.

Dimensions, Inches

Nominal Pipe Size	A Diameter of Flange	B Thickness of Flange Min.	C Diameter of Hub	D Length Through Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts
3	9½	1½	5	2⅛	7½	8	⅞
4	11½	1¾	6¼	2¾	9¼	8	1⅛
5	13¾	2	7½	3⅛	11	8	1¼
6	15	2⅜	9¼	3⅜	12½	12	1⅛
8	18½	2½	11¾	....	15½	12	1⅜
10	21½	2¾	14½	....	18½	16	1⅜
12	24	3⅛	16½	....	21	20	1⅜
14 O.D.	25¼	3⅜	17¾	....	22	20	1½
16 O.D.	27¾	3½	20	....	24¼	20	1⅝
18 O.D.	31	4	22¼	....	27	20	1⅞
20 O.D.	33¾	4¼	24½	....	29½	20	2
24 O.D.	41	5½	29½	....	35½	20	2½

Thickness of raised face is not included in thickness of flange minimum. For sizes below 3 inches use the dimensions of the 1500 lb. flanges.

Series 150

For Maximum Steam Service Pressure of 1500 Lb. per Sq. In. (Gauge)  
at a Temperature of 750°F.

Dimensions, Inches

Nominal Pipe Size	A Diameter of Flange	B Thickness of Flange Min.	C Diameter of Hub	D Length Through Hub	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolts
1	5⅞	1⅛	2⅛	1⅝	4	4	⅞
1¼	6¼	1⅛	2½	1⅝	4⅜	4	⅞
1½	7	1¼	2¾	1¾	4⅞	4	1
2	8½	1½	4⅛	2¼	6½	8	⅞
2½	9⅝	1⅝	4⅞	2½	7½	8	1
3	10½	1⅞	5¼	2⅞	8	8	1⅛
4	12¼	2⅛	6⅜	3⅜	9½	8	1¼
5	14¾	2⅞	7¾	3⅝	11½	8	1½
6	15½	3¼	9	4⅛	12½	12	1⅜
8	19	3⅝	11½	....	15½	12	1⅝
10	23	4¼	14½	....	19	12	1⅞
12	26½	4⅞	17¾	....	22½	16	2
14 O.D.	....	....	....	....	....	....	....
16 O.D.	....	....	....	....	....	....	....
18 O.D.	....	....	....	....	....	....	....
20 O.D.	....	....	....	....	....	....	....
24 O.D.	....	....	....	....	....	....	....

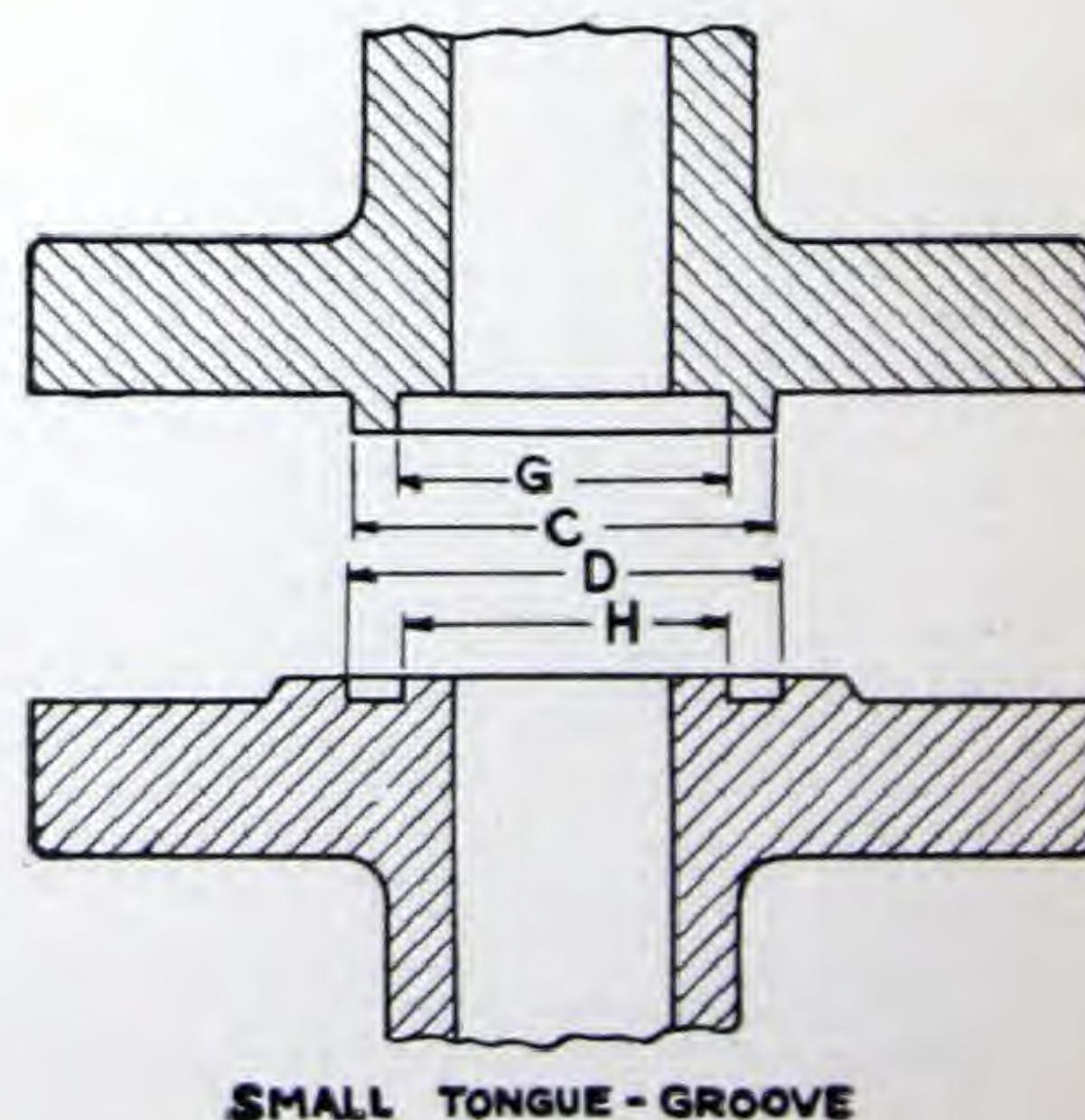
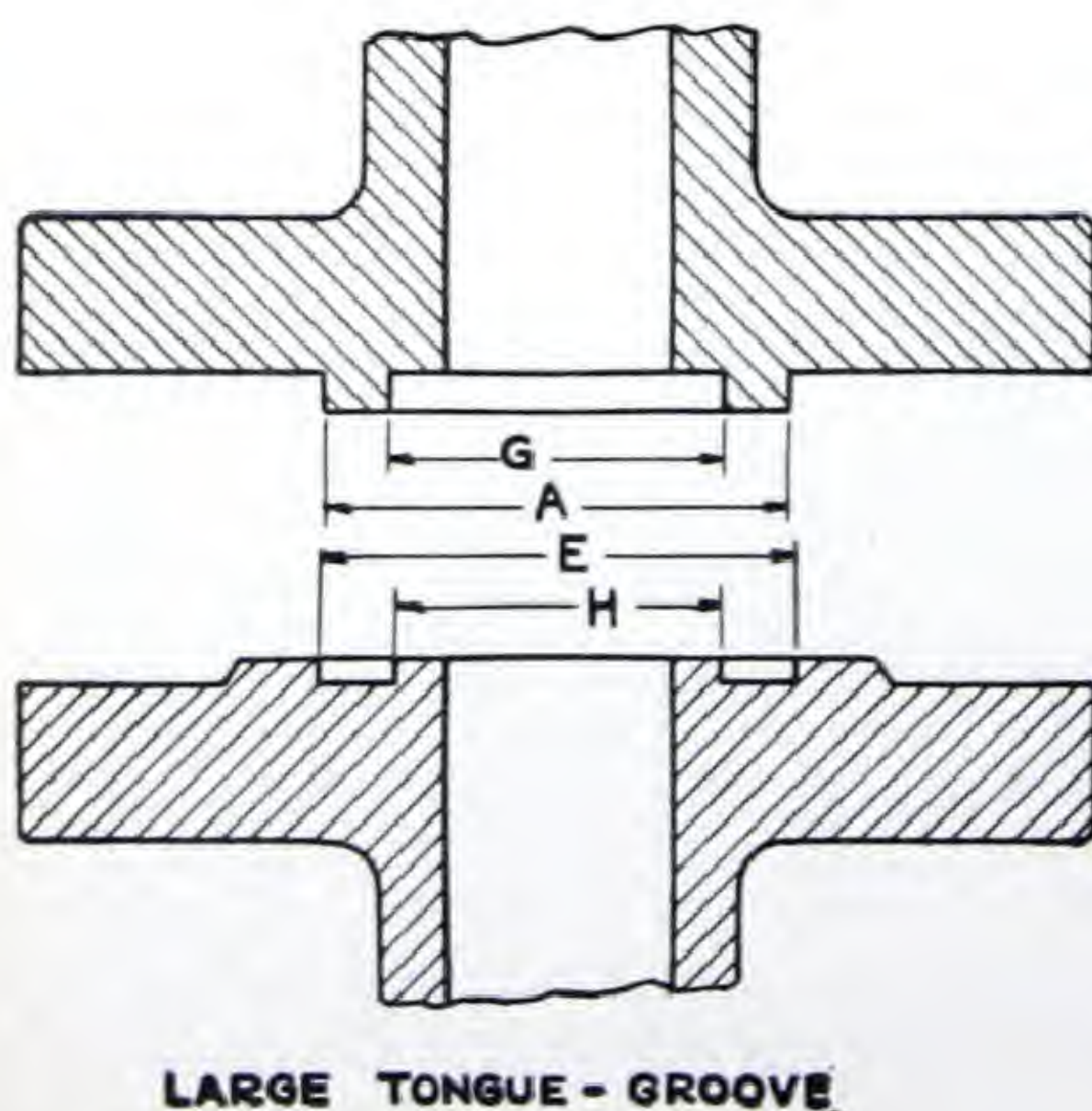
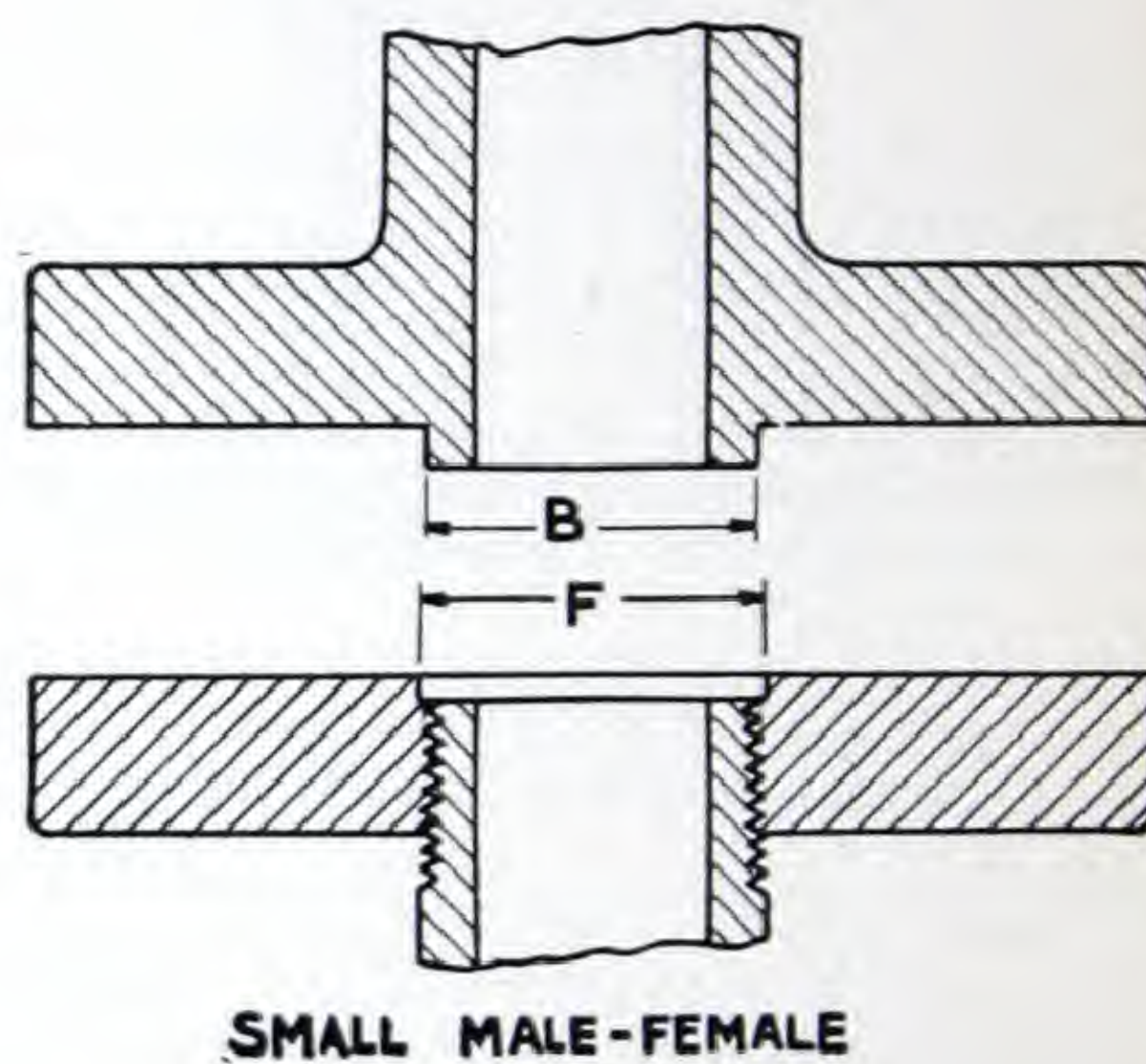
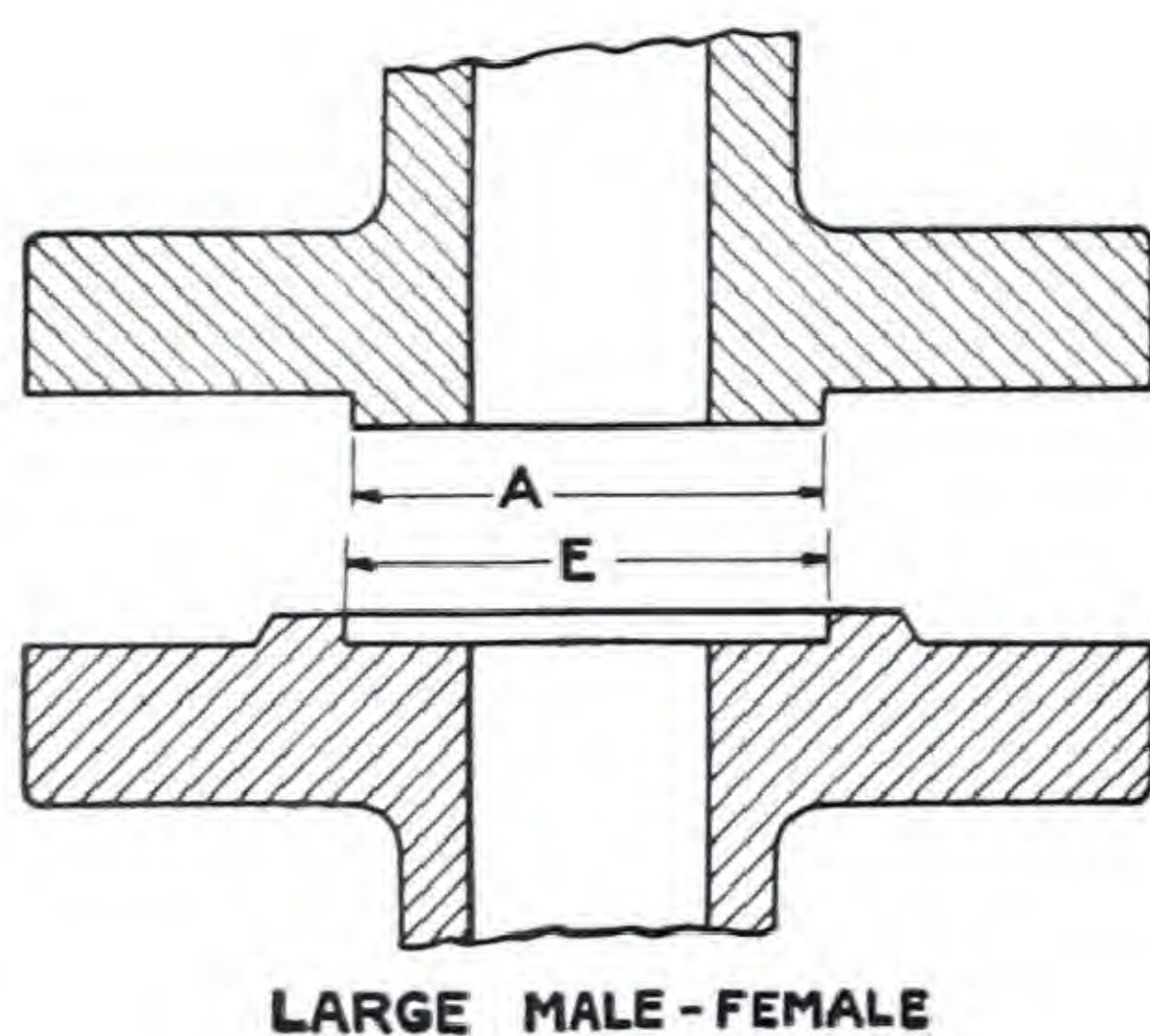
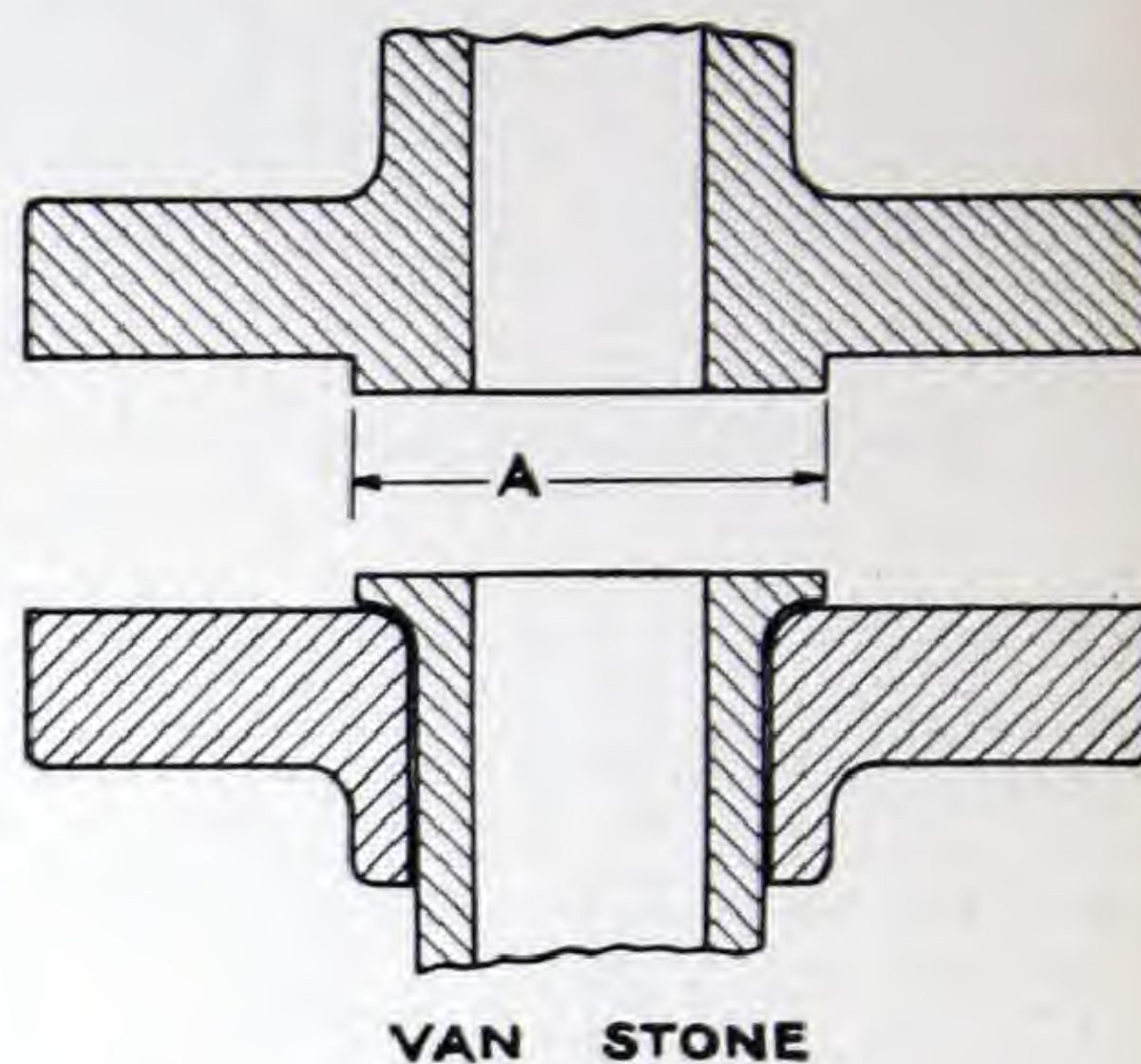
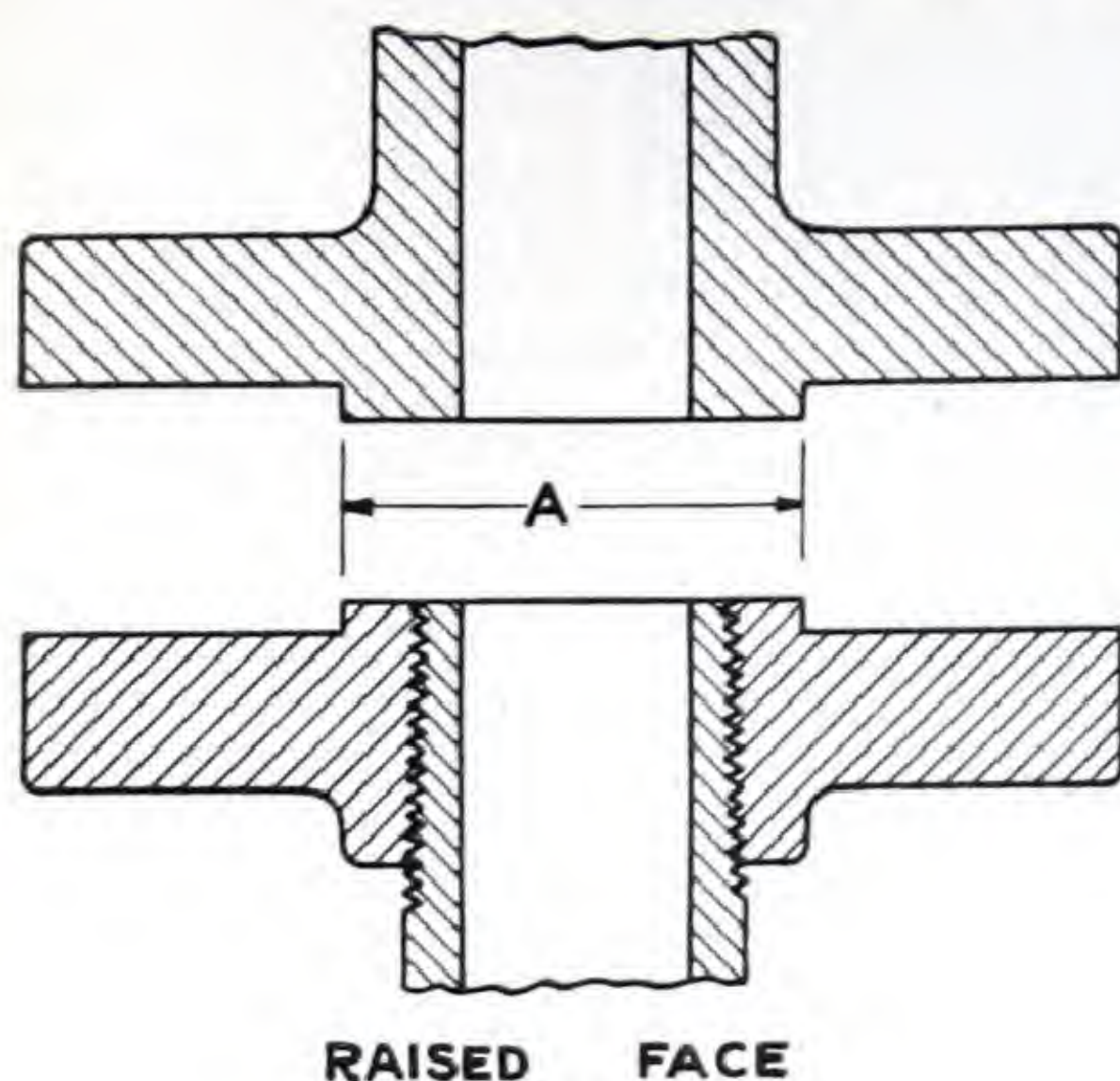
Thickness of raised face is not included in thickness of flange minimum.

INDEX



## Application of Various Facings to Steel Valves and Fittings

(Dimensions listed on next page)





## Dimensions of Various Facings to Steel Valves and Fittings

American 150, 300, 400, 600, 900 and 1500 Pounds

Nominal Pipe Size (Inches)	A	B	C	D	E	F	G	H			
		Outside Diameter					Inside Diameter		Height		Depth
	Raised Face Van Stone, Large Male and Large Tongue	Small Male	Small Tongue	Small Groove	Large Female and Large Groove	Small Female	Large and Small Tongue	Large and Small Groove	Raised Face 150 and 300 lbs. St'ds.	Raised Face, Large and Small Male and Tongue 400, 600, 900 and 1500 lbs. St'ds	Depth of Groove or Female
1/2	1 3/8	23/32	1 3/8	1 7/16	1 7/16	25/32	1	15/16	1/16	1/4	3/16
3/4	1 11/16	15/16	1 11/16	1 3/4	1 3/4	1	1 5/16	1 1/4	1/16	1/4	3/16
1	2	1 3/16	1 7/8	1 15/16	2 1/16	1 1/4	1 1/2	1 7/16	1/16	1/4	3/16
1 1/4	2 1/2	1 1/2	2 1/4	2 5/16	2 9/16	1 9/16	1 7/8	1 13/16	1/16	1/4	3/16
1 1/2	2 7/8	1 3/4	2 1/2	2 9/16	2 15/16	1 13/16	2 1/8	2 1/16	1/16	1/4	3/16
2	3 5/8	2 1/4	3 1/4	3 5/16	3 11/16	2 5/16	2 7/8	2 13/16	1/16	1/4	3/16
2 1/2	4 1/8	2 11/16	3 3/4	3 13/16	4 3/16	2 3/4	3 3/8	3 5/16	1/16	1/4	3/16
3	5	3 5/16	4 5/8	4 11/16	5 1/16	3 3/8	4 1/4	4 3/16	1/16	1/4	3/16
3 1/2	5 1/2	3 13/16	5 1/8	5 3/16	5 9/16	3 7/8	4 3/4	4 11/16	1/16	1/4	3/16
4	6 3/16	4 5/16	5 11/16	5 3/4	6 1/4	4 3/8	5 3/16	5 1/8	1/16	1/4	3/16
5	7 5/16	5 3/8	6 13/16	6 7/8	7 3/8	5 7/16	6 5/16	6 1/4	1/16	1/4	3/16
6	8 1/2	6 3/8	8	8 1/16	8 9/16	6 7/16	7 1/2	7 7/16	1/16	1/4	3/16
8	10 5/8	8 3/8	10	10 1/16	10 11/16	8 7/16	9 3/8	9 5/16	1/16	1/4	3/16
10	12 3/4	10 1/2	12	12 1/16	12 13/16	10 9/16	11 1/4	11 3/16	1/16	1/4	3/16
12	15	12 1/2	14 1/4	14 5/16	15 1/16	12 9/16	13 1/2	13 7/16	1/16	1/4	3/16
14 O.D.	16 1/4	13 3/4	15 1/2	15 9/16	16 5/16	13 13/16	14 3/4	14 11/16	1/16	1/4	3/16
16 O.D.	18 1/2	15 3/4	17 5/8	17 11/16	18 9/16	15 13/16	16 3/4	16 11/16	1/16	1/4	3/16
18 O.D.	21	17 3/4	20 1/8	20 3/16	21 1/16	17 13/16	19 1/4	19 3/16	1/16	1/4	3/16
20 O.D.	23	19 3/4	22	22 1/16	23 1/16	19 13/16	21	20 15/16	1/16	1/4	3/16
24 O.D.	27 1/4	23 3/4	26 1/4	26 5/16	27 5/16	23 13/16	25 1/4	25 3/16	1/16	1/4	3/16

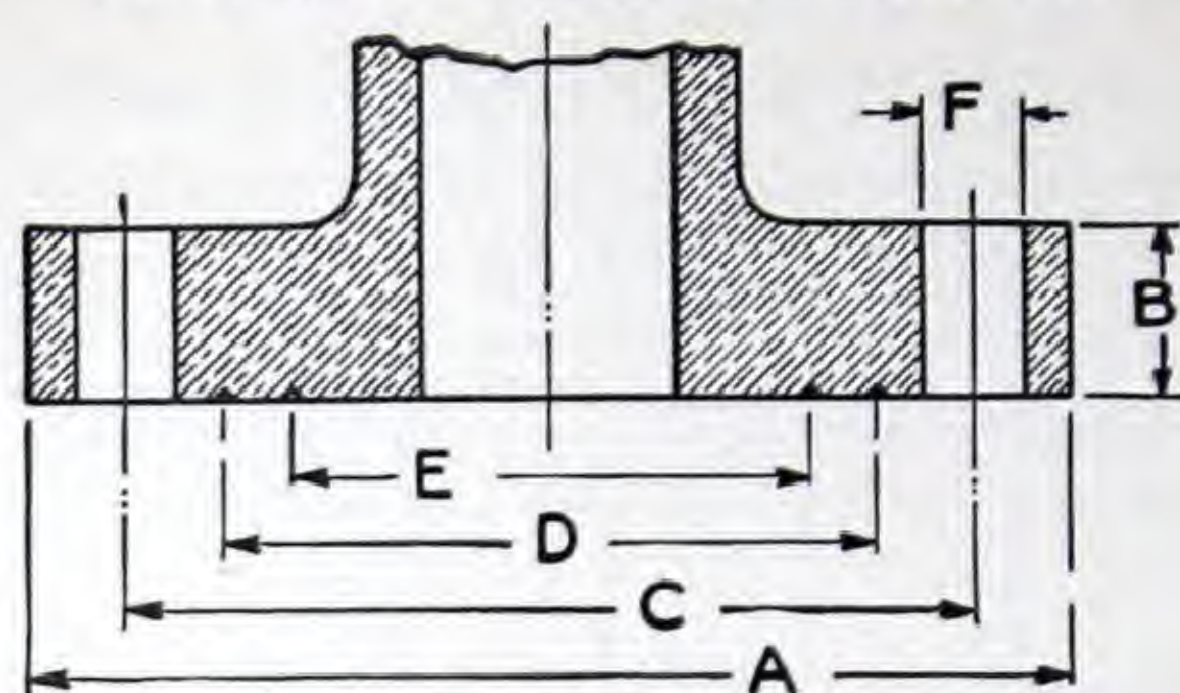
Regular facing for 150 and 300 lb. steel flanged fittings and companion flange standards is a 1/16 inch raised face included in the minimum flange thickness. A 1/16 inch raised face is also permitted on the 400, 600, 900, and 1500 lb. flange standards, but it must be added to the minimum flange thickness.

Regular facing for 400, 600, 900, and 1500 lb. flange standards is a 1/4 inch raised face not included in minimum flange thickness.

A tolerance of plus or minus 0.016 inch (1/64 inch) is allowed on the inside and outside diameters of all facings.



## Bronze Flange Standard



### 150 Lb. Steam Pressure Pattern

Dimensions, Inches

Nominal Pipe Size	A Diameter of Flange	B Thickness of Flange Min.	C Diameter of Bolt Circle	D Diameter of Outer Groove	E Diameter of Inner Groove	F Diameter of Bolt Holes	Diameter of Bolts	Number of Bolts
$\frac{1}{2}$	$3\frac{1}{2}$	$\frac{5}{16}$	$2\frac{3}{8}$	$1\frac{3}{8}$	$1\frac{1}{16}$	$\frac{5}{8}$	$\frac{1}{2}$	4
$\frac{3}{4}$	$3\frac{7}{8}$	$\frac{11}{32}$	$2\frac{3}{4}$	$1\frac{3}{4}$	$1\frac{1}{4}$	$\frac{5}{8}$	$\frac{1}{2}$	4
1	$4\frac{1}{4}$	$\frac{3}{8}$	$3\frac{1}{8}$	$2\frac{1}{8}$	$1\frac{5}{8}$	$\frac{5}{8}$	$\frac{1}{2}$	4
$1\frac{1}{4}$	$4\frac{5}{8}$	$\frac{13}{32}$	$3\frac{1}{2}$	$2\frac{1}{2}$	2	$\frac{5}{8}$	$\frac{1}{2}$	4
$1\frac{1}{2}$	5	$\frac{7}{16}$	$3\frac{7}{8}$	$2\frac{7}{8}$	$2\frac{3}{8}$	$\frac{5}{8}$	$\frac{1}{2}$	4
2	6	$\frac{1}{2}$	$4\frac{3}{4}$	$3\frac{1}{2}$	$2\frac{7}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	4
$2\frac{1}{2}$	7	$\frac{9}{16}$	$5\frac{1}{2}$	$4\frac{1}{4}$	$3\frac{5}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	4
3	$7\frac{1}{2}$	$\frac{5}{8}$	6	$4\frac{3}{4}$	$4\frac{1}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	4
$3\frac{1}{2}$	$8\frac{1}{2}$	$\frac{11}{16}$	7	$5\frac{3}{4}$	$5\frac{1}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	8
4	9	$\frac{11}{16}$	$7\frac{1}{2}$	$6\frac{1}{4}$	$5\frac{5}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	8
5	10	$\frac{3}{4}$	$8\frac{1}{2}$	7	$6\frac{1}{4}$	$\frac{7}{8}$	$\frac{3}{4}$	8
6	11	$\frac{13}{16}$	$9\frac{1}{2}$	8	$7\frac{1}{4}$	$\frac{7}{8}$	$\frac{3}{4}$	8
8	$13\frac{1}{2}$	$\frac{15}{16}$	$11\frac{3}{4}$	$10\frac{1}{4}$	$9\frac{1}{2}$	$\frac{7}{8}$	$\frac{3}{4}$	8
10	16	1	$14\frac{1}{4}$	$12\frac{1}{2}$	$11\frac{1}{2}$	1	$\frac{7}{8}$	12
12	19	$1\frac{1}{16}$	17	$15\frac{1}{4}$	$14\frac{1}{4}$	1	$\frac{7}{8}$	12

These flange diameters and drilling templates are the same as those of the American 125 lb. Cast Iron Flange Standard and 150 lb. Steel Flange Standard.

### 250 Lb. Steam Pressure Pattern

Dimensions, Inches

Nominal Pipe Size	A Diameter of Flange	B Thickness of Flange Min.	C Diameter of Bolt Circle	D Diameter of Outer Groove	E Diameter of Inner Groove	F Diameter of Bolt Holes	Diameter of Bolts	Number of Bolts
$\frac{1}{2}$	$3\frac{3}{4}$	$\frac{15}{32}$	$2\frac{5}{8}$	$1\frac{5}{8}$	$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{1}{2}$	4
$\frac{3}{4}$	$4\frac{5}{8}$	$\frac{7}{16}$	$3\frac{1}{4}$	2	$1\frac{3}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	4
1	$4\frac{7}{8}$	$\frac{1}{2}$	$3\frac{1}{2}$	$2\frac{1}{4}$	$1\frac{5}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	4
$1\frac{1}{4}$	$5\frac{1}{4}$	$\frac{17}{32}$	$3\frac{7}{8}$	$2\frac{5}{8}$	2	$\frac{3}{4}$	$\frac{5}{8}$	4
$1\frac{1}{2}$	$6\frac{1}{8}$	$\frac{9}{16}$	$4\frac{1}{2}$	3	$2\frac{1}{4}$	$\frac{7}{8}$	$\frac{3}{4}$	4
2	$6\frac{1}{2}$	$\frac{5}{8}$	5	$3\frac{3}{4}$	$3\frac{1}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	8
$2\frac{1}{2}$	$7\frac{1}{2}$	$\frac{11}{16}$	$5\frac{7}{8}$	$4\frac{3}{8}$	$3\frac{5}{8}$	$\frac{7}{8}$	$\frac{3}{4}$	8
3	$8\frac{1}{4}$	$\frac{3}{4}$	$6\frac{5}{8}$	$5\frac{1}{8}$	$4\frac{3}{8}$	$\frac{7}{8}$	$\frac{3}{4}$	8
$3\frac{1}{2}$	9	$\frac{13}{16}$	$7\frac{1}{4}$	$5\frac{3}{4}$	5	$\frac{7}{8}$	$\frac{3}{4}$	8
4	10	$\frac{7}{8}$	$7\frac{7}{8}$	$6\frac{3}{8}$	$5\frac{5}{8}$	$\frac{7}{8}$	$\frac{3}{4}$	8
5	11	$\frac{15}{16}$	$9\frac{1}{4}$	$7\frac{3}{4}$	7	$\frac{7}{8}$	$\frac{3}{4}$	8
6	$12\frac{1}{2}$	1	$10\frac{5}{8}$	$9\frac{1}{8}$	$8\frac{3}{8}$	$\frac{7}{8}$	$\frac{3}{4}$	12
8	15	$1\frac{1}{8}$	13	$11\frac{1}{4}$	$10\frac{1}{4}$	1	$\frac{7}{8}$	12
10	$17\frac{1}{2}$	$\frac{13}{16}$	$15\frac{1}{4}$	$13\frac{1}{4}$	12	$1\frac{1}{8}$	1	16
12	$20\frac{1}{2}$	$1\frac{1}{4}$	$17\frac{3}{4}$	$15\frac{1}{2}$	14	$1\frac{1}{4}$	$1\frac{1}{8}$	16

These flange diameters and drilling templates are the same as those of the American 250 lb. Cast Iron Flange Standard and of the 250 lb. Steel Flange Standard as well as of the "American 600 lb. SP Steel Flange Standard" for  $1\frac{1}{2}$  inch and smaller sizes.



Dimensions of Standard Wrought Pipe

Nominal Pipe Size	Outside Diameter	Inside Diameter	Thickness	Internal Area	LENGTH OF PIPE CON- TAINING ONE CUBIC FOOT	NOMINAL WEIGHT PER FOOT	NUMBER OF THREADS OF SCREW
Inches	Inches	Inches	Inches	Square Inches	Feet	Pounds	Per Inch
1/8	.405	.27	.068	.0568	2513.	.241	27
1/4	.54	.364	.088	.1041	1383.3	.42	18
3/8	.675	.494	.091	.1909	751.2	.559	18
1/2	.84	.623	.109	.3039	472.4	.837	14
3/4	1.05	.824	.113	.5333	270.	1.115	14
1	1.315	1.048	.134	.8609	166.9	1.668	11 1/2
1 1/4	1.66	1.38	.14	1.4957	96.25	2.244	11 1/2
1 1/2	1.9	1.611	.145	2.0358	70.66	2.678	11 1/2
2	2.375	2.067	.154	3.3556	42.91	3.609	11 1/2
2 1/2	2.875	2.468	.204	4.78	30.1	5.739	8
3	3.5	3.067	.217	7.3827	19.5	7.536	8
3 1/2	4.	3.548	.226	9.886	14.57	9.001	8
4	4.5	4.026	.237	12.73	11.31	10.665	8
4 1/2	5.	4.508	.246	15.960	9.02	12.34	8
5	5.563	5.045	.259	19.985	7.2	14.502	8
6	6.625	6.065	.28	28.886	4.98	18.762	8
7	7.625	7.023	.301	38.743	3.72	23.271	8
8	8.625	7.982	.322	50.021	2.88	28.177	8
9	9.625	8.937	.344	62.722	2.29	33.701	8
10	10.75	10.019	.366	78.822	1.82	40.065	8
11	11.75	11.	.375	95.034	1.51	45.95	8
12	12.75	12.	.375	113.09	1.27	48.985	8

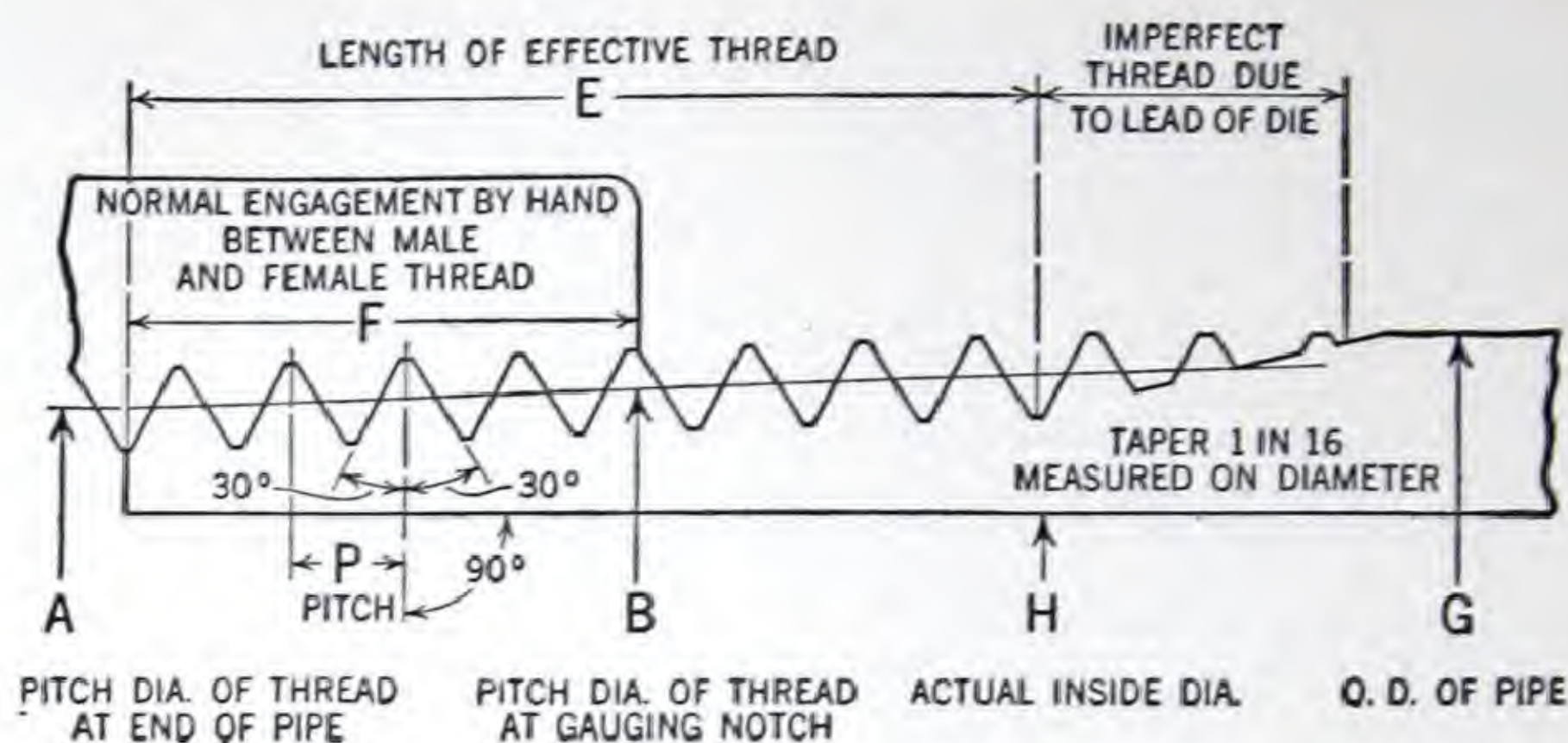
Dimensions of Extra Strong Wrought Pipe

Dimensions of Double Extra Strong Wrought Pipe

Nominal Internal Diameter	Actual External Diameter	Approxi- mate Internal Diameter	Nominal Thickness	Internal Area	Nominal Weight Per Foot	Actual External Diameter	Approxi- mate Internal Diameter	Nominal Thickness	Nominal Weight Per Foot
Inches	Inches	Inches	Inches	Square Inches	Pounds	Inches	Inches	Inches	Pounds
1/8	.405	.205	.1	.033	.29				
1/4	.54	.294	.123	.068	.54				
3/8	.675	.421	.127	.139	.74				
1/2	.84	.542	.149	.231	1.09	.84	.244	.298	1.7
3/4	1.05	.736	.157	.425	1.39	1.05	.422	.314	2.44
1	1.315	.951	.182	.71	2.17	1.315	.587	.364	3.65
1 1/4	1.66	1.272	.194	1.271	3.	1.66	.885	.388	5.2
1 1/2	1.9	1.494	.203	1.753	3.63	1.9	1.088	.406	6.4
2	2.375	1.933	.221	2.935	5.02	2.375	1.491	.442	9.02
2 1/2	2.875	2.315	.28	4.209	7.67	2.875	1.755	.560	13.68
3	3.5	2.892	.304	6.569	10.25	3.5	2.284	.608	18.56
3 1/2	4.	3.358	.321	8.856	12.47	4.	2.716	.642	22.75
4	4.5	3.818	.341	11.449	14.97	4.5	3.136	.682	27.48
4 1/2	5.00	4.280	.360	14.387	18.22	5.000	3.564	.718	32.53
5	5.563	4.813	.375	18.193	20.54	5.563	4.063	.75	38.12
6	6.625	5.75	.437	25.976	28.58	6.625	4.875	.875	53.11
7	7.625	6.625	.500	34.472	37.67	7.625	5.875	.875	62.38
8	8.625	7.625	.500	45.664	43.00	8.625	6.875	.875	71.62
9	9.625	8.625	.500	58.426	48.25				
10	10.750	9.750	.500	74.662	54.25				
12	12.750	11.750	.500	108.43	65.00				



## American (Briggs) Standard Pipe Thread



$$A = G - (0.05G + 1.1) P$$

$$B = A + .0625 F$$

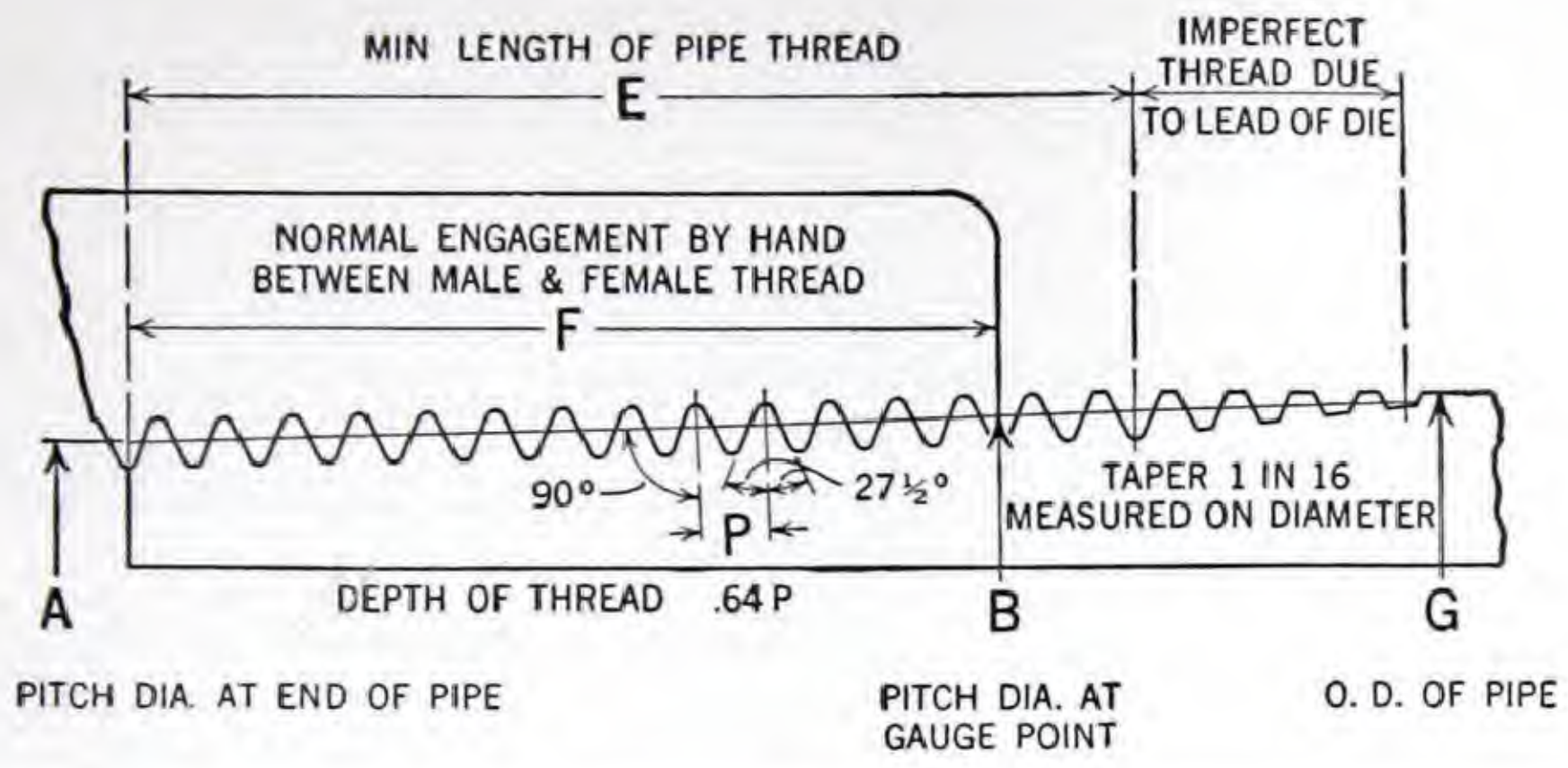
$$E = P (0.8G + 6.8)$$

$$\text{DEPTH OF THREAD} = 0.8 P$$

Nominal Size	A	B	E	F	G	H	Depth of Threads	Number of Threads
Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Per Inch
1/8	.36351	.37476	.2638	.180	.405	.269	.02963	27
1/4	.47739	.48989	.4018	.200	.540	.364	.04444	18
3/8	.61201	.62701	.4078	.240	.675	.493	.04444	18
1/2	.75843	.77843	.5337	.320	.840	.622	.05714	14
3/4	.96768	.98886	.5457	.339	1.050	.824	.05714	14
1	1.21363	1.23863	.6828	.400	1.315	1.049	.06956	11 1/2
1 1/4	1.55713	1.58338	.7068	.420	1.660	1.380	.06956	11 1/2
1 1/2	1.79609	1.82234	.7235	.420	1.900	1.610	.06956	11 1/2
2	2.26902	2.29627	.7565	.436	2.375	2.067	.06956	11 1/2
2 1/2	2.71953	2.76216	1.1375	.682	2.875	2.469	.10000	8
3	3.34063	3.38850	1.2000	.766	3.500	3.068	.10000	8
3 1/2	3.83750	3.88881	1.2500	.821	4.000	3.548	.10000	8
4	4.33438	4.38713	1.3000	.844	4.500	4.026	.10000	8
4 1/2	4.83125	4.88594	1.3500	.875	5.000	4.506	.10000	8
5	5.39073	5.44929	1.4063	.937	5.563	5.047	.10000	8
6	6.44609	6.50597	1.5125	.958	6.625	6.065	.10000	8
7	7.43984	7.50234	1.6125	1.000	7.625	7.023	.10000	8
8	8.43359	8.50003	1.7125	1.063	8.625	7.981	.10000	8
9	9.42734	9.49797	1.8125	1.130	9.625	8.941	.10000	8
10	10.54531	10.62094	1.9250	1.210	10.750	10.020	.10000	8
12	12.53281	12.61781	2.1250	1.360	12.750	12.000	.10000	8
14 O.D.	13.77500	13.87262	2.250	1.562	14.000	.....	.10000	8
15 O.D.	14.76875	14.87419	2.350	1.687	15.000	.....	.10000	8
16 O.D.	15.76250	15.87575	2.450	1.812	16.000	.....	.10000	8
18 O.D.	17.75000	17.87500	2.659	2.000	18.000	.....	.10000	8
20 O.D.	19.73750	19.87031	2.850	2.125	20.000	.....	.10000	8
22 O.D.	21.72500	21.86562	3.050	2.250	22.000	.....	.10000	8
24 O.D.	23.71250	23.86094	3.250	2.375	24.000	.....	.10000	8



British (Whitworth) Standard Pipe Thread



Nominal Size	A	B	E	F	G	Depth of Threads	Number of Threads
Inches	Inches	Inches	Inches	Inches	Inches	Inches	Per Inch
1/8	.350	.360	3/8	.156	13/32	.0230	28
1/4	.473	.4845	7/16	.187	17/32	.0335	19
3/8	.607	.6225	1/2	.250	11/16	.0335	19
1/2	.764	.7795	5/8	.250	27/32	.0455	14
3/4	.973	.9955	3/4	.375	11/16	.0455	14
1	1.228	1.251	7/8	.375	111/32	.0580	11
1 1/4	1.561	1.592	1	.500	111/16	.0580	11
1 1/2	1.793	1.824	1	.500	129/32	.0580	11
2	2.250	2.289	1 1/8	.625	23/8	.0580	11
2 1/2	2.859	2.902	1 1/4	.687	3	.0580	11
3	3.351	3.402	1 3/8	.812	3 1/2	.0580	11
3 1/2	3.837	3.892	1 1/2	.875	4	.0580	11
4	4.329	4.392	1 5/8	1.000	4 1/2	.0580	11
4 1/2	4.829	4.892	1 5/8	1.000	5	.0580	11
5	5.322	5.392	1 3/4	1.125	5 1/2	.0580	11
6	6.306	6.392	2	1.375	6 1/2	.0580	11
7	7.300	7.386	2 1/8	1.375	7 1/2	.0640	10
8	8.292	8.386	2 1/4	1.500	8 1/2	.0640	10
9	9.292	9.386	2 1/4	1.500	9 1/2	.0640	10
10	10.284	10.386	2 3/8	1.625	10 1/2	.0640	10
12	12.268	12.370	2 1/2	1.625	12 1/2	.0800	8
13	13.498	13.600	2 5/8	1.625	13 3/4	.0800	8
14	14.491	14.600	2 3/4	1.750	14 3/4	.0800	8
15	15.491	15.600	2 3/4	1.750	15 3/4	.0800	8
16	16.483	16.600	2 7/8	1.875	16 3/4	.0800	8
17	17.475	17.600	3	2.000	17 3/4	.0800	8
18	18.475	18.600	3	2.000	18 3/4	.0800	8

INDEX



## Properties of Saturated Steam

Condensed from Steam Tables and Diagrams by Marks & Davis, with the  
Permission of the Publishers, Messrs. Longmans, Green & Co.

Vacuum Inches of Mercury	Temperature Fahr.	Total Heat Above 32° Fahr.		Latent Heat of Evaporation	Volume, Cubic Feet in One Pound of Steam	Weight of One Cubic Foot Steam, Pound
		Heat Units in the Water	Heat Units in the Steam			
29.74	32.00	0.00	1073.4	1073.4	3294.0	0.000304
29.18	70.00	38.06	1090.3	1052.3	871.0	0.001148
25.85	126.15	94.0	1115.0	1021.0	173.5	0.00576
15.67	176.85	144.7	1136.5	991.8	53.56	0.01867
9.56	193.22	161.1	1143.1	982.0	38.38	0.02606
5.49	201.96	169.9	1146.5	976.6	32.36	0.03090
Lbs. Gauge						
.0	212.0	180.0	1150.4	970.4	26.79	0.03732
0.3	213.0	181.0	1150.7	969.7	26.27	0.03806
1.3	216.3	184.4	1152.0	967.6	24.79	0.04042
2.3	219.4	187.5	1153.1	965.6	23.38	0.04277
3.3	222.4	190.5	1154.2	963.7	22.16	0.04512
4.3	225.2	193.4	1155.2	961.8	21.07	0.04746
5.3	228.0	196.1	1156.2	960.0	20.08	0.04980
10.3	240.1	208.4	1160.4	952.0	16.30	0.0614
15.3	250.3	218.8	1163.9	945.1	13.74	0.0728
20.3	259.3	227.9	1166.8	938.9	11.89	0.0841
25.3	267.3	236.1	1169.4	933.3	10.49	0.0953
30.3	274.5	243.4	1171.6	928.2	9.39	0.1065
35.3	281.0	250.1	1173.6	923.5	8.51	0.1175
40.3	287.1	256.3	1175.4	919.0	7.78	0.1285
45.3	292.7	262.1	1177.0	914.9	7.17	0.1394
50.3	298.0	267.5	1178.5	911.0	6.65	0.1503
55.3	302.9	272.6	1179.8	907.2	6.20	0.1612
60.3	307.6	277.4	1181.1	903.7	5.81	0.1721
65.3	312.0	282.0	1182.3	900.3	5.47	0.1829
70.3	316.3	286.3	1183.4	897.1	5.16	0.1937
75.3	320.3	290.5	1184.4	893.9	4.89	0.2044
80.3	324.1	294.5	1185.4	890.9	4.65	0.2151
85.3	327.8	298.3	1186.3	888.0	4.429	0.2258
90.3	331.4	302.0	1187.2	885.2	4.230	0.2365
95.3	334.8	305.5	1188.0	882.5	4.047	0.2472
100.3	338.1	309.0	1188.8	879.8	3.880	0.2577
105.3	341.3	312.3	1189.6	877.2	3.726	0.2683
110.3	344.4	315.5	1190.3	874.7	3.583	0.2791
115.3	347.4	318.6	1191.0	872.3	3.452	0.2897
120.3	350.3	321.7	1191.6	869.9	3.331	0.3002
125.3	353.1	324.6	1192.2	867.6	3.219	0.3107
130.3	355.8	327.4	1192.8	865.4	3.112	0.3213
135.3	358.5	330.2	1193.4	863.2	3.012	0.3320
140.3	361.0	332.9	1194.0	861.0	2.920	0.3425
145.3	363.6	335.6	1194.5	858.8	2.834	0.3529



## Properties of Saturated Steam

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Lbs. Gauge	Temperature Fahr.	Total Heat Above 32° Fahr.		Latent Heat of Evaporation	Volume Cubic Feet in One Pound of Steam	Weight of One Cubic Foot Steam, Pounds
		Heat Units in the Water	Heat Units in the Steam			
150.3	366.0	338.2	1195.0	856.8	2.753	0.3633
155.3	368.5	340.7	1195.4	854.7	2.675	0.3738
160.3	370.8	343.2	1195.9	852.7	2.602	0.3843
165.3	373.1	345.6	1196.4	850.8	2.533	0.3948
170.3	375.4	348.0	1196.8	848.8	2.468	0.4052
175.3	377.6	350.4	1197.3	846.9	2.406	0.4157
180.3	379.8	352.7	1197.7	845.0	2.346	0.4262
185.3	381.9	354.9	1198.1	843.2	2.290	0.437
190.3	384.0	357.1	1198.5	841.4	2.237	0.447
195.3	386.0	359.2	1198.8	839.6	2.187	0.457
200.3	388.0	361.4	1190.2	837.9	2.138	0.468
225.3	397.4	371.4	1200.9	829.5	1.924	0.520
250.3	406.2	380.7	1202.3	821.6	1.750	0.571
275.3	414.4	389.4	1203.6	814.2	1.602	0.624
300.3	421.9	397.5	1204.7	807.2	1.479	0.676
305.3	423.4	399.1	1204.9	805.8	1.456	0.687
315.3	426.3	402.2	1205.3	803.1	1.413	0.708
325.3	429.1	405.3	1205.7	800.4	1.372	0.729
335.3	431.9	408.2	1206.1	797.8	1.334	0.750
345.3	434.6	411.2	1206.4	795.3	1.298	0.770
355.3	437.2	414.0	1206.8	792.8	1.264	0.791
365.3	439.8	416.8	1207.1	790.3	1.231	0.812
375.3	442.3	419.5	1207.4	787.9	1.200	0.833
385.3	444.8	422	1208	786	1.17	0.86
400.3	448.5	427.5	1208.5	780	1.10	0.90
435.3	456.5	435	1209	774	1.04	0.96
485.3	467.3	448	1210	762	0.93	1.08
535.3	477.3	459	1210	751	0.83	1.20
585.3	486.6	469	1210	741	0.76	1.32
650.3	497.5	482	1211	729	0.70	1.43
700.3	505.5	491	1211	720	0.65	1.54
750.3	513.5	500	1211	711	0.61	1.64
800.3	521.0	508	1210	702	0.57	1.75
850.3	527.8	516	1209	693	0.53	1.89
900.3	534.4	524	1209	685	0.50	2.00
950.3	540.7	531	1208	677	0.48	2.08
1000.3	546.7	538	1206	668	0.45	2.22
1050.3	552.5	545	1205	660	0.43	2.33
1100.3	558.3	552	1204	652	0.41	2.44
1150.3	563.7	558	1203	645	0.39	2.57
1200.3	569.3	565	1201	636	0.37	2.71



## Temperature Conversion Table

### Fahrenheit and Centigrade Scales

Cent. Equiv.	Given Temp. Either C. or F.	Fahr. Equiv.	Cent. Equiv.	Given Temp. Either C. or F.	Fahr. Equiv.	Cent. Equiv.	Given Temp. Either C. or F.	Fahr. Equiv.
-40.0	-40	-40	16.7	62	143.6	182	360	680
-34.4	-30	-22	17.2	63	145.4	188	370	698
-28.9	-20	-4	17.8	64	147.2	193	380	716
-23.3	-10	14	18.3	65	149.0	199	390	734
-17.8	0	32	18.9	66	150.8	204	400	752
-17.2	1	33.8	19.4	67	152.6	210	410	770
-16.7	2	35.6	20.0	68	154.4	216	420	788
-16.1	3	37.4	20.6	69	156.2	221	430	806
-15.6	4	39.2	21.1	70	158.0	227	440	824
-15.0	5	41.0	21.7	71	159.8	232	450	842
-14.4	6	42.8	22.2	72	161.6	238	460	860
-13.9	7	44.6	22.8	73	163.4	243	470	878
-13.3	8	46.4	23.3	74	165.2	249	480	896
-12.8	9	48.2	23.9	75	167.0	254	490	914
-12.2	10	50.0	24.4	76	168.8	266	510	950
-11.7	11	51.8	25.0	77	170.6	271	520	968
-11.1	12	53.6	25.6	78	172.4	277	530	986
-10.6	13	55.4	26.1	79	174.2	282	540	1004
-10.0	14	57.2	26.7	80	176.0	288	550	1022
-9.44	15	59.0	27.2	81	177.8	293	560	1040
-8.89	16	60.8	27.8	82	179.6	299	570	1058
-8.33	17	62.6	28.3	83	181.4	304	580	1076
-7.78	18	64.4	28.9	84	183.2	310	590	1094
-7.22	19	66.2	29.4	85	185.0	316	600	1112
-6.67	20	68.0	30.0	86	186.8	321	610	1130
-6.11	21	69.8	30.6	87	188.6	327	620	1148
-5.56	22	71.6	31.1	88	190.4	332	630	1166
-5.00	23	73.4	31.7	89	192.2	338	640	1184
-4.44	24	75.2	32.2	90	194.0	343	650	1202
-3.89	25	77.0	32.8	91	195.8	349	660	1220
-3.33	26	78.8	33.3	92	197.6	354	670	1238
-2.78	27	80.6	33.9	93	199.4	360	680	1256
-2.22	28	82.4	34.4	94	201.2	366	690	1274
-1.67	29	84.2	35.0	95	203.0	371	700	1292
-1.11	30	86.0	35.6	96	204.8	377	710	1310
-0.56	31	87.8	36.1	97	206.6	382	720	1328
0	32	89.6	36.7	98	208.4	388	730	1346
0.56	33	91.4	37.2	99	210.2	393	740	1364
1.11	34	93.2	37.8	100	212.0	399	750	1382
1.67	35	95.0	43	110	230	404	760	1400
2.22	36	96.8	49	120	248	410	770	1418
2.78	37	98.6	54	130	266	416	780	1436
3.33	38	100.4	60	140	284	421	790	1454
3.89	39	102.2	66	150	302	427	800	1472
4.44	40	104.0	71	160	320	432	810	1490
5.00	41	105.8	77	170	338	438	820	1508
5.56	42	107.6	82	180	356	443	830	1526
6.11	43	109.4	88	190	374	449	840	1544
6.67	44	111.2	93	200	392	454	850	1562
7.22	45	113.0	99	210	410	460	860	1580
7.78	46	114.8	100	212	413	466	870	1598
8.33	47	116.6	104	220	428	471	880	1616
8.89	48	118.4	110	230	446	477	890	1634
9.44	49	120.2	116	240	464	482	900	1652
10.6	51	123.8	121	250	482	488	910	1670
11.1	52	125.6	127	260	500	493	920	1688
11.7	53	127.4	132	270	518	499	930	1706
12.2	54	129.2	138	280	536	504	940	1724
12.8	55	131.0	143	290	554	510	950	1742
13.3	56	132.8	149	300	572	516	960	1760
13.9	57	134.6	154	310	590	521	970	1778
14.4	58	136.4	160	320	608	527	980	1796
15.0	59	138.2	166	330	626	532	990	1814
15.6	60	140.0	171	340	644	538	1000	1832
16.1	61	141.8	177	350	662			

To obtain intermediate temperature not contained in tables—add correct factor, shown at right, to the nearest temperature of that desired. For example:  $101^{\circ}\text{F.} = 38.36^{\circ}\text{C.}$ , obtained by adding the factor .56 to the Centigrade equivalent  $37.8^{\circ}$ , for  $100^{\circ}\text{F.}$

#### FACTORS

	C.	F.		C.	F.
1	.56	1.8	6	3.33	10.8
2	1.11	3.6	7	3.89	12.6
3	1.67	5.4	8	4.44	14.4
4	2.22	7.2	9	5.00	16.2
5	2.78	9.0	10	5.56	18.0



Temperature Conversion Table—Continued  
Fahrenheit and Centigrade Scales

Cent. Equiv.	Given Temp. Either C. or F.	Fahr. Equiv.	Cent. Equiv.	Given Temp. Either C. or F.	Fahr. Equiv.	Cent. Equiv.	Given Temp. Either C. or F.	Fahr. Equiv.
543	1010	1850	916	1680	3056	1282	2340	4244
549	1020	1868	921	1690	3074	1288	2350	4262
554	1030	1886	927	1700	3092	1293	2360	4280
560	1040	1904	932	1710	3110	1299	2370	4298
566	1050	1922	938	1720	3128	1304	2380	4316
571	1060	1940	943	1730	3146	1310	2390	4334
577	1070	1958	949	1740	3164	1316	2400	4352
582	1080	1976	954	1750	3182	1321	2410	4370
588	1090	1994	960	1760	3200	1327	2420	4388
593	1100	2012	966	1770	3218	1332	2430	4406
599	1110	2030	971	1780	3236	1338	2440	4424
604	1120	2048	977	1790	3254	1343	2450	4442
610	1130	2066	982	1800	3272	1349	2460	4460
616	1140	2084	988	1810	3290	1354	2470	4478
621	1150	2102	993	1820	3308	1360	2480	4496
627	1160	2120	999	1830	3326	1366	2490	4514
632	1170	2138	1004	1840	3344	1377	2510	4550
638	1180	2156	1010	1850	3362	1382	2520	4568
643	1190	2174	1016	1860	3380	1388	2530	4586
649	1200	2192	1021	1870	3398	1393	2540	4604
654	1210	2210	1027	1880	3416	1399	2550	4622
660	1220	2228	1032	1890	3434	1404	2560	4640
666	1230	2246	1038	1900	3452	1410	2570	4658
671	1240	2264	1043	1910	3470	1416	2580	4676
677	1250	2282	1049	1920	3488	1421	2590	4694
682	1260	2300	1054	1930	3506	1427	2600	4712
688	1270	2318	1060	1940	3524	1432	2610	4730
693	1280	2336	1066	1950	3542	1438	2620	4748
699	1290	2354	1071	1960	3560	1443	2630	4766
704	1300	2372	1077	1970	3578	1449	2640	4784
710	1310	2390	1082	1980	3596	1454	2650	4802
716	1320	2408	1088	1990	3614	1460	2660	4820
721	1330	2426	1093	2000	3632	1466	2670	4838
727	1340	2444	1099	2010	3650	1471	2680	4856
732	1350	2462	1104	2020	3668	1477	2690	4874
738	1360	2480	1110	2030	3686	1482	2700	4892
743	1370	2498	1116	2040	3704	1488	2710	4910
749	1380	2516	1121	2050	3722	1493	2720	4928
754	1390	2534	1127	2060	3740	1499	2730	4946
760	1400	2552	1132	2070	3758	1504	2740	4964
766	1410	2570	1138	2080	3776	1510	2750	4982
771	1420	2588	1143	2090	3794	1516	2760	5000
777	1430	2606	1149	2100	3812	1521	2770	5018
782	1440	2624	1154	2110	3830	1527	2780	5036
788	1450	2642	1160	2120	3848	1532	2790	5054
793	1460	2660	1166	2130	3866	1538	2800	5072
799	1470	2678	1171	2140	3884	1543	2810	5090
804	1480	2696	1177	2150	3902	1549	2820	5108
810	1490	2714	1182	2160	3920	1554	2830	5126
821	1510	2750	1188	2170	3938	1560	2840	5144
827	1520	2768	1193	2180	3956	1566	2850	5162
832	1530	2786	1199	2190	3974	1571	2860	5180
838	1540	2804	1204	2200	3992	1577	2870	5198
843	1550	2822	1210	2210	4010	1582	2880	5216
849	1560	2840	1216	2220	4028	1588	2890	5234
854	1570	2858	1221	2230	4046	1593	2900	5252
860	1580	2876	1227	2240	4064	1599	2910	5270
866	1590	2894	1232	2250	4082	1604	2920	5288
871	1600	2912	1238	2260	4100	1610	2930	5306
877	1610	2930	1243	2270	4118	1616	2940	5324
882	1620	2948	1249	2280	4136	1621	2950	5342
888	1630	2966	1254	2290	4154	1627	2960	5360
893	1640	2984	1260	2300	4172	1632	2970	5378
899	1650	3002	1266	2310	4190	1638	2980	5396
904	1660	3020	1271	2320	4208	1643	2990	5414
910	1670	3038	1277	2330	4226	1649	3000	5432

To obtain intermediate temperature not contained in tables—add correct factor, shown at right, to the nearest temperature of that desired. For example: 101°F. = 38.36°C., obtained by adding the factor .56 to the Centigrade equivalent 37.8°, for 100°F.

FACTORS					
	C.	F.		C.	F.
1	.56	1.8	6	3.33	10.8
2	1.11	3.6	7	3.89	12.6
3	1.67	5.4	8	4.44	14.4
4	2.22	7.2	9	5.00	16.2
5	2.78	9.0	10	5.56	18.0

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## Expansion of Steam Pipes

Temp. Degrees F.	Steel	Wrought Iron	Cast Iron	Brass or Copper	Temp. Degrees F.	Steel	Wrought Iron	Cast Iron	Brass or Copper
Inches Per 100 Feet					Inches Per 100 Feet				
0	0	0	0	0	400	3.45	3.65	3.30	5.25
20	.15	.15	.10	.25	20	3.70	3.90	3.50	5.60
40	.30	.30	.25	.45	40	3.95	4.20	3.75	5.95
60	.45	.45	.40	.65	60	4.20	4.45	4.00	6.30
80	.60	.60	.55	.90	80	4.45	4.70	4.25	6.65
100	.75	.80	.70	1.15	500	4.70	4.90	4.45	7.05
20	.90	.95	.85	1.40	20	4.95	5.15	4.70	7.45
40	1.10	1.15	1.00	1.65	40	5.20	5.40	4.95	7.85
60	1.25	1.35	1.15	1.90	60	5.45	5.70	5.20	8.25
80	1.45	1.50	1.30	2.15	80	5.70	6.00	5.45	8.65
200	1.60	1.65	1.50	2.40	600	6.00	6.25	5.70	9.05
20	1.80	1.85	1.65	2.65	20	6.30	6.55	5.95	9.50
40	2.00	2.05	1.80	2.90	40	6.55	6.85	6.25	9.95
60	2.15	2.20	1.95	3.15	60	6.90	7.20	6.55	10.40
80	2.35	2.40	2.15	3.45	80	7.20	7.50	6.85	10.95
300	2.50	2.60	2.35	3.75	700	7.50	7.85	7.15	11.40
20	2.70	2.80	2.50	4.05	20	7.80	8.20	7.45	11.90
40	2.90	3.05	2.70	4.35	40	8.20	8.55	7.80	12.40
60	3.05	3.25	2.90	4.65	60	8.55	8.90	8.15	12.95
80	3.25	3.45	3.10	4.95	80	8.95	9.30	8.50	13.50
					800	9.30	9.75	8.90	14.10

## Capacity of Extra Heavy Steam Pipes (Power Specialty Co.)

Nominal Pipe Size In.	Inside Area Sq. In.	200 lb.	150 lb.	100 lb.	50 lb.	Nominal Pipe Size In.	Inside Area Sq. In.	200 lb.	150 lb.	100 lb.	50 lb.
Pounds of Steam Per Hour						Pounds of Steam Per Hour					
1	0.71	1210	872	618	362	6	25.93	40800	31600	22600	13210
1 1/4	1.27	2000	1555	1105	646	7	34.47	54600	42250	30000	17600
1 1/2	1.75	2750	2140	1525	894	8	44.18	69500	54000	38400	22450
2	2.93	4610	3590	2550	1525	9	58.42	92000	71500	50800	29800
2 1/2	4.20	6610	5150	3660	2140	10	74.66	117300	91500	65000	38100
3	6.56	10300	8050	5720	3450	11	90.76	142800	111500	79200	46300
3 1/2	8.85	13900	10820	7720	4520	12	108.43	170500	133000	94750	55400
4	11.44	18000	14000	10000	5850	14	153.94	242000	188200	133900	78600
4 1/2	14.18	22300	17350	12320	7230	16	176.71	277500	216200	173800	90500
5	18.19	28610	22250	15800	9300	18	226.98	357000	278000	197500	115700

The pounds per hour in the above table are figured for the velocities given below:

Steam superheated degrees F.....	0	50	100	150	200	250
Velocity, ft. per min.....	8000	8500	8950	9450	9900	10450

## Outflow of Steam into the Atmosphere

External pressure per square inch, 14.7 lbs. absolute. Ratio of expansion in nozzle, 1.624.

Absolute Initial Pressure Per Sq. In.	Velocity of Outflow as at Constant Density	Actual Velocity of Outflow Expanded	Discharge Per Sq. In. of Orifice Per Min.	H.P. Per Sq. In. of Orifice if H.P. equals 30 lbs. Per Hour	Absolute Initial Pressure Per Sq. In.	Velocity of Outflow as at Constant Density	Actual Velocity of Outflow Expanded	Discharge Per Sq. In. of Orifice Per Min.	H.P. Per Sq. In. of Orifice if H.P. equals 30 lbs. Per Hour
lbs.	ft. per sec.	ft. per sec.	lbs.	H.P.	lbs.	ft. per sec.	ft. per sec.	lbs.	H.P.
25.37	863	1401	22.81	45.6	90	895	1454	77.94	155.9
30	867	1408	26.84	53.7	100	898	1459	86.34	172.7
40	874	1419	35.18	70.4	115	902	1466	98.76	197.5
50	880	1429	44.06	88.1	135	906	1472	115.61	231.2
60	885	1437	52.59	105.2	155	910	1478	132.21	264.4
70	889	1444	61.07	122.1	165	912	1481	140.46	280.9
75	891	1447	65.30	130.6	215	919	1493	181.58	363.2



## Flow of Steam Through Pipes

Drop in pressure in a steam pipe does not necessarily indicate a loss of energy, because the friction which causes the drop transforms the energy into heat, and this evaporates moisture and superheats the steam. The superheating effect is very slight ordinarily, but will be very manifest if the pressure drop is large, as illustrated in the throttling calorimeter.

A common rule in laying out piping is to limit the velocity of the steam through the pipe to 6,000 ft. per minute. When the pipes are long, this sometimes gives a greater drop in pressure than is desirable, and it is then best to check the sizes by referring to the tables.

A velocity of 9,000 ft. per minute in steam

pipes is very often used with excellent results, and there is no reason why this cannot be done, provided the boilers can be worked at a pressure sufficient to compensate for the drop in the pipe line.

Flow of Steam from Orifices into a Pressure Above that of the Atmosphere.—The flow of steam of a higher towards a lower pressure increases as the difference of pressure is increased, until the external pressure becomes only 58 per cent. of the absolute initial pressure. Below this point, the flow of steam is neither increased nor diminished by a reduction of external pressure, even to the extent of a perfect vacuum.

## Flow of Steam Through Orifices

Absolute Pressure in Boiler per Square Inch Pounds	Absolute External Pressure per Square Inch Pounds	Ratio of Expansion in Nozzle	Velocity of Outflow at Constant Density Feet per Second	Actual Velocity of Outflow Expanded Feet per Second	Discharge per Square Inch of Orifice per Min. Pounds
75	74	1.012	227.5	230.	16.68
75	72	1.037	386.7	401.	28.35
75	70	1.063	490.	521.	35.93
75	65	1.136	660.	749.	48.38
75	61.62	1.198	736.	876.	53.97
75	60	1.219	765.	933.	56.12
75	50	1.434	873.	1252.	64.
75	45	1.575	890.	1401.	65.24
75	43.46	1.624	890.6	1446.5	65.3
75	15	1.624	890.6	1446.5	65.3
75	0	1.624	890.6	1446.5	65.3

## Pressure Drop of Flow of Steam Through Pipes

Length of Pipe = 1,000 Feet

Drop in Pressure in Pounds per Square Inch Corresponding to Discharge on next page. Densities and Corresponding Absolute Pressures per Square Inch in First Two Lines.

Density. Pressure.	.208 90	.230 100	.284 125	.328 150	.401 180	.443 200	.506 230	.548 250
Drop	18.10	16.4	13.3	11.1	9.39	8.50	7.44	6.87
"	15.60	14.1	11.4	9.60	8.09	7.33	6.41	5.92
"	13.3	12.0	9.74	8.18	6.90	6.24	5.47	5.05
"	11.1	10.0	8.13	6.83	5.76	5.21	4.56	4.21
"	9.25	8.36	6.78	5.69	4.80	4.34	3.80	3.51
"	8.33	7.53	6.10	5.13	4.32	3.91	3.42	3.16
"	7.48	6.76	5.48	4.60	3.88	3.51	3.07	2.84
"	6.67	6.03	4.88	4.10	3.46	3.13	2.74	2.53
"	5.91	5.35	4.33	3.64	3.07	2.78	2.43	2.24
"	5.19	4.69	3.80	3.19	2.69	2.44	2.13	1.97
"	4.52	4.09	3.31	2.78	2.34	2.12	1.86	1.72
"	3.90	3.53	2.86	2.40	2.02	1.83	1.60	1.48
"	3.32	3.00	2.43	2.04	1.72	1.56	1.36	1.26
"	2.79	2.52	2.04	1.72	1.45	1.31	1.15	1.06
"	2.31	2.09	1.69	1.42	1.20	1.08	.949	.877
"	1.87	1.69	1.37	1.15	.97	.878	.769	.710
"	1.47	1.33	1.08	.905	.762	.690	.604	.558
"	1.13	1.02	.828	.695	.586	.531	.456	.429

To get the pressure drop for lengths other than 1,000 feet, multiply by lengths in feet and divide by 1,000.



## Flow of Steam Through Pipes

Length of Pipe = 240 Diameters

Initial Gauge Pressure, Pounds per Sq. In.	Diameter of Pipe in Inches											
	3/4	1	1 1/2	2	2 1/2	3	4	5	6	8	10	12
	Weight of Steam per Minute, in Pounds, with One Pound Loss of Pressure											
1	1.16	2.07	5.7	10.27	15.45	25.38	46.85	77.3	115.9	211.4	341.1	502.4
10	1.44	2.57	7.1	12.72	19.15	31.45	58.05	95.8	143.6	262.0	422.7	622.5
20	1.70	3.02	8.3	14.94	22.49	36.94	68.20	112.6	168.7	307.8	496.5	731.3
30	1.91	3.40	9.4	16.84	25.35	41.63	76.84	126.9	190.1	346.8	559.5	824.1
40	2.10	3.74	10.3	18.51	27.87	45.77	84.49	139.5	209.0	381.3	615.3	906.0
50	2.27	4.04	11.2	20.01	30.13	49.48	91.34	150.8	226.0	412.2	665.0	979.5
60	2.43	4.32	11.9	21.38	32.19	52.87	97.60	161.1	241.5	440.5	710.6	1046.7
70	2.57	4.58	12.6	22.65	34.10	56.00	103.37	170.7	255.8	466.5	752.7	1108.5
80	2.71	4.82	13.3	23.82	35.87	58.91	108.74	179.5	269.0	490.7	791.7	1166.1
90	2.83	5.04	13.9	24.92	37.52	61.62	113.74	187.8	281.4	513.3	828.1	1219.8
100	2.95	5.25	14.5	25.96	39.07	64.18	118.47	195.6	293.1	534.6	862.6	1270.1
120	3.16	5.63	15.5	27.85	41.93	68.87	127.12	209.9	314.5	573.7	925.6	1363.3
150	3.45	6.14	17.0	30.37	45.72	75.09	138.61	228.8	343.0	625.5	1009.2	1486.5

Diameters up to 5 inches inclusive are *actual* internal diameters of standard pipe.

This table gives approximately the weight of steam per minute which will flow from various initial pressures, with one pound loss of pressure, through straight, smooth pipes.

## Flow of Steam Through Pipes

Length of Pipe = 1,000 Feet

Discharge in Pounds per Minute Corresponding to Drop in Pressure on preceding page for Pipe Diameters in Inches in Top Line

Diameter.	12"	10"	8"	6"	4"	3"	2 1/2"	2"	1 1/2"	1"
Discharge	2328	1443	799	371	123.	55.9	28.8	18.1	6.81	2.52
"	2165	1341	742	344	114.6	51.9	27.6	16.8	6.52	2.34
"	1996	1237	685	318	106.	47.9	26.4	15.5	6.24	2.16
"	1830	1134	628	292	97.0	43.9	25.2	14.2	5.95	1.98
"	1663	1031	571	265	88.2	39.9	24.0	12.9	5.67	1.80
"	1580	979	542	252	83.8	37.9	22.8	12.3	5.29	1.71
"	1497	928	514	239	79.4	35.9	21.6	11.6	5.00	1.62
"	1414	876	485	226	75.	33.9	20.4	10.9	4.72	1.53
"	1331	825	457	212	70.6	31.9	19.2	10.3	4.43	1.44
"	1248	873	428	199	66.2	23.9	18.0	9.68	4.15	1.35
"	1164	722	400	186	61.7	27.9	16.8	9.03	3.86	1.26
"	1081	670	371	172	57.3	25.9	15.6	8.38	3.68	1.17
"	998	619	343	159	52.9	23.9	14.4	7.74	3.40	1.08
"	915	567	314	146	48.5	21.9	13.2	7.10	3.11	0.99
"	832	516	286	132	44.1	20.0	12.0	6.45	2.83	0.90
"	748	464	257	119	39.7	18.0	10.8	5.81	2.55	0.81
"	665	412	228	106	35.3	16.0	9.6	5.16	2.26	0.72
"	582	361	200	92.8	30.9	14.0	8.4	4.52	1.98	0.63



# USEFUL ENGINEERING DATA

## Circumferences and Areas of Circles

	Circumference	Area	Diameter	Circumference	Area	Diameter	Circumference	Area
$\frac{1}{64}$	.04909	.00019	$\frac{1}{4}$	10.210	8.2958	9	28.274	63.617
$\frac{1}{32}$	.09818	.00077	$\frac{5}{16}$	10.407	8.6179	$\frac{1}{8}$	28.667	65.397
$\frac{3}{64}$	.14726	.00173	$\frac{3}{8}$	10.603	8.9462	$\frac{1}{4}$	29.060	67.201
$\frac{1}{16}$	.19635	.00307	$\frac{7}{16}$	10.799	9.2806	$\frac{3}{8}$	29.452	69.029
$\frac{3}{32}$	.29452	.00690	$\frac{1}{2}$	10.996	9.6211	$\frac{1}{2}$	29.845	70.882
$\frac{1}{8}$	.39270	.01227	$\frac{9}{16}$	11.192	9.9678	$\frac{5}{8}$	30.238	72.760
$\frac{5}{32}$	.49087	.01917	$\frac{5}{8}$	11.388	10.321	$\frac{3}{4}$	30.631	74.662
$\frac{3}{16}$	.58905	.02761	$\frac{11}{16}$	11.585	10.680	$\frac{7}{8}$	31.023	76.589
$\frac{7}{32}$	.68722	.03758	$\frac{3}{4}$	11.781	11.045	10	31.416	78.540
$\frac{1}{4}$	.78540	.04909	$\frac{13}{16}$	11.977	11.416	$\frac{1}{4}$	32.201	82.516
$\frac{9}{32}$	.88357	.06213	$\frac{7}{8}$	12.174	11.793	$\frac{1}{2}$	32.987	86.590
$\frac{5}{16}$	.98175	.07670	$\frac{15}{16}$	12.370	12.177	$\frac{3}{4}$	33.772	90.763
1	1.0799	.09281	4	12.566	12.566	11	34.558	95.033
$\frac{3}{8}$	1.1781	.11045	$\frac{1}{16}$	12.963	12.962	$\frac{1}{4}$	35.343	99.402
$\frac{13}{32}$	1.2763	.12962	$\frac{1}{8}$	12.959	13.364	$\frac{1}{2}$	36.128	103.87
$\frac{7}{16}$	1.3744	.15033	$\frac{3}{16}$	13.155	13.772	$\frac{3}{4}$	36.914	108.43
$\frac{15}{32}$	1.4726	.17257	$\frac{1}{4}$	13.352	14.186	12	37.699	113.10
$\frac{1}{2}$	1.5708	.19635	$\frac{5}{16}$	13.548	14.607	$\frac{1}{4}$	38.485	117.86
$\frac{17}{32}$	1.6690	.22166	$\frac{3}{8}$	13.744	15.033	$\frac{1}{2}$	39.270	122.72
$\frac{9}{16}$	1.7671	.24850	$\frac{7}{16}$	13.941	15.466	$\frac{3}{4}$	40.055	127.68
$\frac{19}{32}$	1.8653	.27688	$\frac{1}{2}$	14.137	15.904	13	40.841	132.73
$\frac{5}{8}$	1.9635	.30680	$\frac{9}{16}$	14.334	16.349	$\frac{1}{4}$	41.626	137.89
$\frac{21}{32}$	2.0617	.33824	$\frac{5}{8}$	14.530	16.800	$\frac{1}{2}$	42.412	143.14
$\frac{11}{16}$	2.1598	.37122	$\frac{11}{16}$	14.726	17.257	$\frac{3}{4}$	43.197	148.49
$\frac{23}{32}$	2.2580	.40574	$\frac{3}{4}$	14.923	17.721	14	43.982	153.94
$\frac{3}{4}$	2.3562	.44179	$\frac{13}{16}$	15.119	18.190	$\frac{1}{4}$	44.768	159.48
$\frac{25}{32}$	2.4544	.47937	$\frac{7}{8}$	15.315	18.665	$\frac{1}{2}$	45.553	165.13
$\frac{13}{16}$	2.5525	.51849	$\frac{15}{16}$	15.512	19.147	$\frac{3}{4}$	46.338	170.87
$\frac{27}{32}$	2.6507	.55914	5	15.708	19.635	15	47.124	176.71
$\frac{7}{8}$	2.7489	.60132	$\frac{1}{16}$	15.904	20.129	$\frac{1}{4}$	47.909	182.65
$\frac{29}{32}$	2.8471	.64504	$\frac{1}{8}$	16.101	20.629	$\frac{1}{2}$	48.695	188.69
$\frac{15}{16}$	2.9452	.69029	$\frac{3}{16}$	16.297	21.135	$\frac{3}{4}$	49.480	194.83
$\frac{31}{32}$	3.0434	.73708	$\frac{1}{4}$	16.493	21.648	16	50.265	201.06
1	3.1416	.7854	$\frac{5}{16}$	16.690	22.166	$\frac{1}{4}$	51.051	207.39
$\frac{1}{16}$	3.3379	.8866	$\frac{3}{8}$	16.886	22.691	$\frac{1}{2}$	51.836	213.82
$\frac{1}{8}$	3.5343	.9940	$\frac{7}{16}$	17.082	23.221	$\frac{3}{4}$	52.622	220.35
$\frac{3}{16}$	3.7306	1.1075	$\frac{1}{2}$	17.279	23.758	17	53.407	226.98
$\frac{1}{4}$	3.9270	1.2272	$\frac{9}{16}$	17.475	24.301	$\frac{1}{4}$	54.192	233.71
$\frac{5}{16}$	4.1233	1.3530	$\frac{5}{8}$	17.671	24.850	$\frac{1}{2}$	54.978	240.53
$\frac{3}{8}$	4.3197	1.4849	$\frac{11}{16}$	17.868	25.406	$\frac{3}{4}$	55.763	247.45
$\frac{7}{16}$	4.5160	1.6230	$\frac{3}{4}$	18.064	25.967	18	56.549	254.47
$\frac{1}{2}$	4.7124	1.7671	$\frac{13}{16}$	18.261	26.535	$\frac{1}{4}$	57.334	261.59
$\frac{9}{16}$	4.9087	1.9175	$\frac{7}{8}$	18.457	27.109	$\frac{1}{2}$	58.119	268.80
$\frac{5}{8}$	5.1051	2.0739	$\frac{15}{16}$	18.653	27.688	$\frac{3}{4}$	58.905	276.12
$\frac{11}{16}$	5.3014	2.2365	6	18.850	28.274	19	59.690	283.53
$\frac{3}{4}$	5.4978	2.4053	$\frac{1}{8}$	19.242	29.465	$\frac{1}{4}$	60.476	291.04
$\frac{13}{16}$	5.6941	2.5802	$\frac{1}{4}$	19.635	30.680	$\frac{1}{2}$	61.261	298.65
$\frac{7}{8}$	5.8905	2.7612	$\frac{3}{8}$	20.028	31.919	$\frac{3}{4}$	62.046	306.35
$\frac{15}{16}$	6.0868	2.9483	$\frac{1}{2}$	20.420	33.183	20	62.832	314.16
2	6.2832	3.1416	$\frac{5}{8}$	20.813	34.472	$\frac{1}{4}$	63.617	322.06
$\frac{1}{16}$	6.4795	3.3410	$\frac{3}{4}$	21.206	35.785	$\frac{1}{2}$	64.403	330.06
$\frac{1}{8}$	6.6759	3.5466	$\frac{7}{8}$	21.598	37.122	$\frac{3}{4}$	65.188	338.16
$\frac{3}{16}$	6.8722	3.7583	7	21.991	38.485	21	65.973	346.36
$\frac{1}{4}$	7.0686	3.9761	$\frac{1}{8}$	22.384	39.871	$\frac{1}{4}$	66.759	354.66
$\frac{5}{16}$	7.2649	4.2000	$\frac{1}{4}$	22.776	41.282	$\frac{1}{2}$	67.544	363.05
$\frac{3}{8}$	7.4613	4.4301	$\frac{3}{8}$	23.169	42.718	$\frac{3}{4}$	68.330	371.54
$\frac{7}{16}$	7.6576	4.6664	$\frac{1}{2}$	23.562	44.179	22	69.115	380.13
$\frac{1}{2}$	7.8540	4.9087	$\frac{5}{8}$	23.955	45.664	$\frac{1}{4}$	69.900	388.82
$\frac{9}{16}$	8.0503	5.1572	$\frac{3}{4}$	24.347	47.173	$\frac{1}{2}$	70.686	397.61
$\frac{5}{8}$	8.2467	5.4119	$\frac{7}{8}$	24.740	48.707	$\frac{3}{4}$	71.471	406.49
$\frac{11}{16}$	8.4430	5.6727	8	25.133	50.265	23	72.257	415.48
$\frac{3}{4}$	8.6394	5.9396	$\frac{1}{8}$	25.525	51.849	$\frac{1}{4}$	73.042	424.56
$\frac{13}{16}$	8.8357	6.2126	$\frac{1}{4}$	25.918	53.456	$\frac{1}{2}$	73.827	433.74
$\frac{7}{8}$	9.0321	6.4918	$\frac{3}{8}$	26.311	55.088	$\frac{3}{4}$	74.613	443.01
$\frac{15}{16}$	9.2284	6.7771	$\frac{1}{2}$	26.704	56.745	24	75.398	452.39
3	9.4248	7.0686	$\frac{5}{8}$	27.096	58.426			
$\frac{1}{16}$	9.6211	7.3662	$\frac{3}{4}$	27.489	60.132			
$\frac{1}{8}$	9.8175	7.6699	$\frac{7}{8}$	27.882	61.862			
$\frac{3}{16}$	10.014	7.9798						



## Decimal and Metric Equivalents of Parts of an Inch

Fractional Inches	Decimal Inches	Millimeters	Fractional Inches	Decimal Inches	Millimeters
$\frac{1}{64}$ =	.015625 =	0.39687	$\frac{33}{64}$ =	.515625 =	13.09671
$\frac{1}{32}$ =	.03125 =	0.79374	$\frac{17}{32}$ =	.53125 =	13.49362
$\frac{3}{64}$ =	.046875 =	1.19061	$\frac{35}{64}$ =	.546875 =	13.89045
$\frac{1}{16}$ =	.0625 =	1.58748	$\frac{9}{16}$ =	.5625 =	14.28737
$\frac{5}{64}$ =	.078125 =	1.98435	$\frac{37}{64}$ =	.578125 =	14.68419
$\frac{3}{32}$ =	.09375 =	2.38123	$\frac{19}{32}$ =	.59375 =	15.08111
$\frac{7}{64}$ =	.109375 =	2.77809	$\frac{39}{64}$ =	.609375 =	15.47793
$\frac{1}{8}$ =	.125 =	3.17497	$\frac{5}{8}$ =	.625 =	15.87485
$\frac{9}{64}$ =	.140625 =	3.57183	$\frac{41}{64}$ =	.640625 =	16.27167
$\frac{5}{32}$ =	.15625 =	3.96871	$\frac{21}{32}$ =	.65625 =	16.66859
$\frac{11}{64}$ =	.171875 =	4.36557	$\frac{43}{64}$ =	.671875 =	17.06541
$\frac{3}{16}$ =	.1875 =	4.76245	$\frac{11}{16}$ =	.6875 =	17.46234
$\frac{13}{64}$ =	.203125 =	5.15931	$\frac{45}{64}$ =	.703125 =	17.85915
$\frac{7}{32}$ =	.21875 =	5.55620	$\frac{23}{32}$ =	.71875 =	18.25608
$\frac{15}{64}$ =	.234375 =	5.95305	$\frac{47}{64}$ =	.734375 =	18.65289
$\frac{1}{4}$ =	.25 =	6.34994	$\frac{3}{4}$ =	.75 =	19.04982
$\frac{17}{64}$ =	.265625 =	6.74679	$\frac{49}{64}$ =	.765625 =	19.44663
$\frac{9}{32}$ =	.28125 =	7.14368	$\frac{25}{32}$ =	.78125 =	19.84356
$\frac{19}{64}$ =	.296875 =	7.54053	$\frac{51}{64}$ =	.796875 =	20.24037
$\frac{5}{16}$ =	.3125 =	7.93743	$\frac{13}{16}$ =	.8125 =	20.63731
$\frac{21}{64}$ =	.328125 =	8.33427	$\frac{53}{64}$ =	.828125 =	21.03411
$\frac{11}{32}$ =	.34375 =	8.73117	$\frac{27}{32}$ =	.84375 =	21.43105
$\frac{23}{64}$ =	.359375 =	9.12801	$\frac{55}{64}$ =	.859375 =	21.82785
$\frac{3}{8}$ =	.375 =	9.52491	$\frac{7}{8}$ =	.875 =	22.22479
$\frac{25}{64}$ =	.390625 =	9.92175	$\frac{57}{64}$ =	.890625 =	22.62159
$\frac{13}{32}$ =	.40625 =	10.31865	$\frac{29}{32}$ =	.90625 =	23.01853
$\frac{27}{64}$ =	.421875 =	10.71549	$\frac{59}{64}$ =	.921875 =	23.41533
$\frac{7}{16}$ =	.4375 =	11.11240	$\frac{15}{16}$ =	.9375 =	23.81228
$\frac{29}{64}$ =	.453125 =	11.50923	$\frac{61}{64}$ =	.953125 =	24.20907
$\frac{15}{32}$ =	.46875 =	11.90614	$\frac{31}{32}$ =	.96875 =	24.60602
$\frac{31}{64}$ =	.484375 =	12.30297	$\frac{63}{64}$ =	.984375 =	25.00281
$\frac{1}{2}$ =	.5 =	12.69988	1 =	1.00000 =	25.39977

## Decimal Inch Equivalents of Millimeters

Milli-meters	Dec. of an Inch	Milli-meters	Dec. of an Inch	Milli-meters	Inches	Milli-meters	Inches
1	.03937	15	.59055	100	3.9371	450	17.7169
2	.07874	20	.78740	125	4.9213	500	19.6854
3	.11811	25	.98425	150	5.9056	550	21.6539
4	.15748	25, 39	1.00000	175	6.8899	600	23.6225
5	.19685	30	1.1811	200	7.8742	650	25.5910
6	.23622	40	1.5748	225	8.8584	700	27.5596
7	.27559	50	1.9685	250	9.8427	800	31.4966
8	.31496	60	2.3622	300	11.8112	900	35.4337
9	.35433	70	2.7560	350	13.7798	950	37.4023
10	.39370	80	3.1497	400	15.7483	1000	39.3708



## Melting Points of Chemical Elements

Chemical Element	Chemical Symbol	Deg. Centigrade	Deg. Fahrenheit	Chemical Element	Chemical Symbol	Deg. Centigrade	Deg. Fahrenheit	Chemical Element	Chemical Symbol	Deg. Centigrade	Deg. Fahrenheit
Aluminum...	Al	659	1218	Iodine.....	I	114	237	Ruthenium..	Ru	1950	3542
Antimony....	Sb	630	1166	Iridium.....	Ir	2300	4172	Samarium...	Sm	1300	2372
Argon.....	A	-188	-306	Iron.....	Fe	1520	2768	Scandium...	Sc	1400	2552
Arsenic.....	As	850	1562	Krypton.....	Kr	-169	-272	Selenium...	Se	217	423
Barium.....	Ba	850	1562	Lanthanum...	La	810	1490	Silicon.....	Si	1420	2588
Beryllium...	Be	1800	3272	Lead.....	Pb	327	621	Silver.....	Ag	961	1762
Bismuth....	Pb	271	520	Lithium.....	Li	186	367	Sodium.....	Na	97	207
Boron.....	B	2200	3992	Magnesium...	Mg	651	1204	Strontium...	Sr	830	1525
Bromine....	Br	-7	+19	Manganese...	Mn	1225	2237	Sulphur....	S	113	235
Cadmium....	Cd	321	610	Mercury.....	Hg	-39	-38	Tantalum...	Ta	2850	5162
Caesium....	Cs	26	79	Molybdenum..	Mo	2500	4532	Tellurium...	Te	452	846
Calcium....	Ca	810	1490	Neodymium...	Nd	840	1544	Thallium...	Tl	302	576
Cerium.....	Ce	640	1184	Neon.....	Ne	-253	-423	Thorium....	Th	1700	3092
Chlorine....	Cl	-102	-152	Nickel.....	Ni	1452	2646	Tin.....	Sn	232	450
Chromium...	Cr	1510	2750	Nitrogen.....	N	-210	-346	Titanium...	Ti	1900	3452
Cobalt.....	Co	1490	2714	Osmium.....	Os	2700	4892	Tungsten...	W	3000	5432
Copper.....	Cu	1083	1981	Oxygen.....	O	-235	-391	Uranium....	U	2400	4352
Fluorine....	F	-223	-369	Palladium...	Pd	1550	2822	Vanadium...	V	1750	3182
Gallium....	Ga	30	86	Phosphorus...	P	44	111	Xenon.....	Xe	-140	-220
Germanium...	Ge	958	1756	Platinum....	Pt	1755	3191	Ytterbium...	Yb	1800	3272
Gold.....	Au	1063	1945	Potassium...	K	62	144	Yttrium....	Y	1250	2282
Helium.....	He	-267	-449	Praesodymium	Pr	940	1724	Zinc.....	Zn	419	786
Hydrogen....	H	-258	-432	Rhodium.....	Rh	1940	3524	Zirconium..	Zr	1700	3092
Indium.....	In	155	311	Rubidium....	Rb	38	100				

## Specific Gravity and Properties of Metals

Metal or Composition	Chemical Symbol	Specific Gravity	Weight per Cubic Inch, Pounds	Weight per Cubic Foot, Pounds	Structure*	Linear Expansion per Unit Length Per Deg. F.
Aluminum.....	Al	2.56	0.0924	159.7	M	0.00001234
Antimony....	Sb	6.71	0.2422	418.7	B	0.00000627
Barium.....	Ba	3.75	0.1354	234.0	M	
Bismuth....	Pb	9.80	0.3538	611.5	B	0.00000975
Boron.....	B	2.60	0.0939	162.2	H	
Brass 80 C., 20 Z.		8.60	0.3105	536.6	M	0.00000957
70 C., 30 Z.		8.40	0.3032	524.1		
60 C., 40 Z.		8.36	0.3018	521.7		
50 C., 50 Z.		8.20	0.2960	511.6		
Bronze.....		8.85	0.3195	552.2	B	0.00000986
Cadmium....	Cd	8.60	0.3105	536.6	M	
Calcium....	Ca	1.57	0.0567	98.0	M	
Chromium...	Cr	6.50	0.2347	405.6	B	
Cobalt.....	Co	8.65	0.3123	539.8	M	
Copper.....	Cu	8.82	0.3184	550.4	M	0.00000887
Gold.....	Au	19.32	0.6975	1205.6	M	0.00000786
Iridium....	Ir	22.42	0.8094	1399.0	M	0.00000356
Iron, cast..	Fe	7.20	0.2600	449.2	B	0.00000556
Iron, wrought	Fe	7.85	0.2834	489.8	M	0.00000648
Lead.....	Pb	11.37	0.4105	709.5	S	0.00001571
Magnesium...	Mg	1.74	0.0628	108.6	M	
Manganese...	Mn	7.42	0.2679	463.0	B	
Mercury (60 deg. F.)	Hg	13.58	0.4902	847.4	F	
Molybdenum..	Mo	8.56	0.3090	534.2	B	
Nickel.....	Ni	8.80	0.3177	549.1	M	0.00000695
Platinum, rolled	Pt	22.67	0.8184	1414.6	M	0.00000479
Platinum, wire	Pt	21.04	0.7595	1312.9		
Potassium...	K	0.87	0.0314	54.3	S	
Silver.....	Ag	10.53	0.3802	657.1	M	0.00001079
Sodium.....	Na	0.98	0.0354	61.1	S	
Steel.....	Fe	7.80	0.2816	486.7	M	0.00000636
Tellurium...	Te	6.25	0.2256	390.0	B	
Tin.....	Sn	7.29	0.2632	454.8	M	0.00001163
Titanium...	Ti	3.54	0.1278	220.9	M	
Tungsten...	W	18.77	0.6776	1171.2	B	
Vanadium...	Va	5.50	0.1986	343.2	M	
Zinc, cast..	Zn	6.86	0.2476	428.1	B	0.00001407
Zinc, rolled	Zn	7.15	0.2581	446.1	M	

\* B = brittle; F = fluid; H = hard; M = malleable; S = soft.



COMPARISON OF VALVE FLANGES

Diameter of Flanges	Size of Pipe, Inches																								
	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	6	7	8	9	10	12	14	16	18	20	24
American Standard..	2 1/2	2 1/2	3 1/2	3 7/8	4 1/4	4 5/8	5	6	7	7 1/2	8 1/2	9	9 1/4	10	11	12 1/2	13 1/2	15	16	19	21	23 1/2	25	27 1/2	32
American Extra Heavy.	3	3	3 3/4	4 5/8	4 7/8	5 1/4	6 1/8	6 1/2	7 1/2	8 1/4	9	10	10 1/2	11	12 1/2	14	15	16 1/4	17 1/2	20 1/2	23	25 1/2	28	30 1/2	36
British No. 1.	2 1/2	3	3 3/4	4	4 1/2	4 3/4	5 1/4	6	6 1/2	7 1/4	8	8 1/2	9	10	11	12	13 1/4	14 1/2	16	18	20 3/4	22 3/4	25 1/4	27 3/4	32 1/2
British No. 2.	—	—	3 3/4	4	4 3/4	5 1/4	5 1/2	6 1/2	7 1/4	8	8 1/2	9	10	11	12	13 1/4	14 1/2	16	17	19 1/4	21 3/4	24	26 1/2	29	33 1/2

Degrees on Baumés Hydrometer  
Converted into Specific Gravity

Deg. Baumé	Specific Gravity		Deg. Baumé	Specific Gravity		Deg. Baumé	Specific Gravity	
	Liquids Heavier than Water	Liquids Lighter than Water		Liquids Heavier than Water	Liquids Lighter than Water		Liquids Heavier than Water	Liquids Lighter than Water
0	1.000	.....	27	1.229	0.892	54	1.593	0.761
1	1.007	.....	28	1.239	0.886	55	1.611	0.757
2	1.014	.....	29	1.250	0.881	56	1.629	0.753
3	1.021	.....	30	1.261	0.875	57	1.648	0.749
4	1.028	.....	31	1.272	0.870	58	1.667	0.745
5	1.036	.....	32	1.283	0.864	59	1.686	0.741
6	1.043	.....	33	1.295	0.859	60	1.706	0.737
7	1.051	.....	34	1.306	0.854	61	1.726	0.733
8	1.058	.....	35	1.318	0.849	62	1.747	0.729
9	1.066	.....	36	1.330	0.843	63	1.768	0.725
10	1.074	1.000	37	1.343	0.838	64	1.790	0.721
11	1.082	0.993	38	1.355	0.833	65	1.813	0.718
12	1.090	0.986	39	1.368	0.828	66	1.836	0.714
13	1.099	0.979	40	1.381	0.824	67	1.859	0.710
14	1.107	0.972	41	1.394	0.819	68	1.883	0.707
15	1.115	0.966	42	1.408	0.814	69	1.908	0.704
16	1.124	0.959	43	1.422	0.809	70	1.933	0.700
17	1.133	0.952	44	1.436	0.805	71	1.959	0.696
18	1.142	0.946	45	1.450	0.800	72	1.986	0.693
19	1.151	0.940	46	1.465	0.796	73	2.014	0.689
20	1.160	0.933	47	1.480	0.791	74	2.042	0.686
21	1.169	0.927	48	1.495	0.787	75	2.071	0.683
22	1.179	0.921	49	1.510	0.782	76	2.101	0.679
23	1.189	0.915	50	1.526	0.778	77	2.132	0.676
24	1.198	0.909	51	1.542	0.773	78	2.164	0.673
25	1.208	0.903	52	1.559	0.769	79	2.197	0.669
26	1.219	0.897	53	1.576	0.765	80	2.230	0.666



USEFUL ENGINEERING DATA

Flow of Water in Pipes

CONDITION OF DISCHARGE	PRESSURE IN MAIN Lbs. Per Square Inch	Discharge, or Quantity capable of being delivered, in Cubic Feet per Minute from the Pipe, under the conditions specified in the first column.								
		DIAMETER OF PIPE, INCHES								
		1/2	3/8	3/4	1	1 1/2	2	3	4	6
Through 35 feet of service-pipe, no back pressure.	30	1.10	1.92	3.01	6.13	16.58	33.34	88.16	173.85	444.63
	40	1.27	2.22	3.48	7.08	19.14	38.50	101.80	200.75	513.42
	50	1.42	2.48	3.89	7.92	21.40	43.04	113.82	224.44	574.02
	60	1.56	2.71	4.26	8.67	23.44	47.15	124.68	245.87	628.81
	75	1.74	3.03	4.77	9.70	26.21	52.71	139.39	274.89	703.03
	100	2.01	3.50	5.50	11.20	30.27	60.87	160.96	317.41	811.79
	130	2.29	3.99	6.28	12.77	34.51	69.40	183.52	361.91	925.58
Through 100 feet of service-pipe, no back pressure.	30	0.66	1.16	1.84	3.78	10.40	21.30	58.19	118.13	317.23
	40	0.77	1.34	2.12	4.36	12.01	24.59	67.19	136.41	366.30
	50	0.86	1.50	2.37	4.88	13.43	27.50	75.13	152.51	409.54
	60	0.94	1.65	2.60	5.34	14.71	30.12	82.30	167.06	448.63
	75	1.05	1.84	2.91	5.97	16.45	33.68	92.01	186.78	501.58
	100	1.22	2.13	3.36	6.90	18.99	38.89	106.24	215.68	579.18
	130	1.39	2.42	3.83	7.86	21.66	44.34	121.14	245.91	660.36
Through 100 feet of service-pipe, and 15 feet vertical rise.	30	0.55	0.96	1.52	3.11	8.57	17.55	47.90	97.17	260.56
	40	0.66	1.15	1.81	3.72	10.24	20.95	57.20	116.01	311.09
	50	0.75	1.31	2.06	4.24	11.67	23.87	65.18	132.20	354.49
	60	0.83	1.45	2.29	4.70	12.94	26.48	72.28	146.61	393.13
	75	0.94	1.64	2.59	5.32	14.64	29.96	81.79	165.90	444.85
	100	1.10	1.92	3.02	6.21	17.10	35.00	95.55	193.82	519.72
	130	1.26	2.20	3.48	7.14	19.66	40.23	109.82	222.75	597.31
Through 100 feet of service-pipe, and 30 feet vertical rise.	30	0.44	0.77	1.22	2.50	6.80	14.11	38.63	78.54	211.54
	40	0.55	0.97	1.53	3.15	8.68	17.79	48.68	98.98	266.59
	50	0.65	1.14	1.79	3.69	10.16	20.82	56.98	115.87	312.08
	60	0.73	1.28	2.02	4.15	11.45	23.47	64.22	130.59	351.73
	75	0.84	1.47	2.32	4.77	13.15	26.95	73.76	149.99	403.98
	100	1.00	1.74	2.75	5.65	15.58	31.93	87.38	177.67	478.55
	130	1.15	2.02	3.19	6.55	18.07	37.02	101.33	206.04	554.96

Pressure of a Column of Water  
Per Square Inch and Square Foot in Pounds

Head	Pressure per Square Inch	Pressure per Square Foot	Head	Pressure per Square Inch	Pressure per Square Foot	Head	Pressure per Square Inch	Pressure per Square Foot
Inches	Lbs.	Lbs.	Feet	Lbs.	Lbs.	Feet	Lbs.	Lbs.
1/20	.....	.260	2	.86	125.0	80	34.65	4999.7
1/10	.....	.520	3	1.30	187.5	85	36.82	5312.2
2/10	.....	1.041	4	1.73	250.0	90	38.98	5624.6
3/10	.....	1.562	5	2.16	312.5	95	41.15	5937.1
4/10	.....	2.083	6	2.59	375.0	100	43.31	6249.6
5/10	.....	2.604	7	3.03	437.5	110	47.64	6874.6
6/10	.....	3.124	8	3.46	500.0	120	51.98	7499.5
7/10	.....	3.645	9	3.89	562.5	130	56.31	8124.5
8/10	.....	4.166	10	4.33	624.9	140	60.64	8749.4
9/10	.....	4.687	15	6.49	937.4	150	64.97	9374.4
1	.0362	5.208	20	8.66	1249.9	200	86.63	13124
2	.0723	10.416	25	10.82	1562.4	250	108.29	16249
3	.1085	15.624	30	12.99	1874.9	300	129.95	19374
4	.1446	20.833	35	15.16	2187.4	350	151.61	22499
5	.1808	26.040	40	17.32	2499.8	400	173.27	26248
6	.217	31.248	45	19.49	2812.3	450	194.92	29373
7	.253	36.457	50	21.65	3124.8	500	216.58	32498
8	.289	41.666	55	23.82	3437.3	600	259.90	38748
9	.325	46.872	60	25.99	3749.8	700	302.22	45622
10	.362	52.08	65	28.15	4062.2	800	346.54	52496
11	.398	57.29	70	30.40	4374.7	900	389.86	58746
12	.434	62.5	75	32.48	4687.2	1000	433.18	64996

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## Weight of Water Per Cubic Foot, and Heat Units Per Pound

From 32° to 212°F

The figures for weight of water in following table, made by interpolating the table given by Clark as calculated from Rankine's formula, with corrections for apparent errors, was published by the author in 1884, *Trans. A. S. M. E.*, vi. 90. The figures for heat units are from Marks and Davis's Steam Tables, 1909.

Temperature degrees Fahr.	Weight in Lbs. per cubic foot	Heat- Units	Temperature degrees Fahr.	Weight in Lbs. per cubic foot	Heat- Units	Temperature degrees Fahr.	Weight in Lbs. per cubic foot	Heat- Units
32	62.42	0.	93	62.10	60.99	154	61.10	121.86
33	62.42	1.01	94	62.09	61.99	155	61.08	122.86
34	62.42	2.02	95	62.08	62.99	156	61.06	123.86
35	62.42	3.02	96	62.07	63.98	157	61.04	124.86
36	62.42	4.03	97	62.06	64.98	158	61.02	125.86
37	62.42	5.04	98	62.05	65.98	159	61.00	126.86
38	62.42	6.04	99	62.03	66.97	160	60.98	127.86
39	62.42	7.05	100	62.02	67.97	161	60.96	128.86
40	62.42	8.05	101	62.01	68.97	162	60.94	129.86
41	62.42	9.05	102	62.00	69.96	163	60.92	130.86
42	62.42	10.06	103	61.99	70.96	164	60.90	131.86
43	62.42	11.06	104	61.97	71.96	165	60.87	132.86
44	62.42	12.06	105	61.96	72.95	166	60.85	133.86
45	62.42	13.07	106	61.95	73.95	167	60.83	134.86
46	62.42	14.07	107	61.93	74.95	168	60.81	135.86
47	62.42	15.07	108	61.92	75.95	169	60.79	136.86
48	62.41	16.07	109	61.91	76.94	170	60.77	137.87
49	62.41	17.08	110	61.89	77.94	171	60.75	138.87
50	62.41	18.08	111	61.88	78.94	172	60.73	139.87
51	62.41	19.08	112	61.86	79.93	173	60.70	140.87
52	62.40	20.08	113	61.85	80.93	174	60.68	141.87
53	62.40	21.08	114	61.83	81.93	175	60.66	142.87
54	62.40	22.08	115	61.82	82.92	176	60.64	143.87
55	62.39	23.08	116	61.80	83.92	177	60.62	144.88
56	62.39	24.08	117	61.78	84.92	178	60.59	145.88
57	62.39	25.08	118	61.77	85.92	179	60.57	146.88
58	62.38	26.08	119	61.75	86.91	180	60.55	147.88
59	62.38	27.08	120	61.74	87.91	181	60.53	148.88
60	62.37	28.08	121	61.72	88.91	182	60.50	149.89
61	62.37	29.08	122	61.70	89.91	183	60.48	150.89
62	62.36	30.08	123	61.68	90.90	184	60.46	151.89
63	62.36	31.07	124	61.67	91.90	185	60.44	152.89
64	62.35	32.07	125	61.65	92.90	186	60.41	153.89
65	62.34	33.07	126	61.63	93.90	187	60.39	154.90
66	62.34	34.07	127	61.61	94.89	188	60.37	155.90
67	62.33	35.07	128	61.60	95.89	189	60.34	156.90
68	62.33	36.07	129	61.58	96.89	190	60.32	157.91
69	62.32	37.06	130	61.56	97.89	191	60.29	158.91
70	62.31	38.06	131	61.54	98.89	192	60.27	159.91
71	62.31	39.06	132	61.52	99.88	193	60.25	160.91
72	62.30	40.05	133	61.51	100.88	194	60.22	161.92
73	62.29	41.05	134	61.49	101.88	195	60.20	162.92
74	62.28	42.05	135	61.47	102.88	196	60.17	163.92
75	62.28	43.05	136	61.45	103.88	197	60.15	164.93
76	62.27	43.04	137	61.43	104.87	198	60.12	165.93
77	62.26	45.04	138	61.41	105.87	199	60.10	166.94
78	62.25	46.04	139	61.39	106.87	200	60.07	167.94
79	62.24	47.04	140	61.37	107.87	201	60.05	168.94
80	62.23	48.03	141	61.36	108.87	202	60.02	169.95
81	62.22	49.03	142	61.34	109.87	203	60.00	170.95
82	62.21	50.03	143	61.32	110.87	204	59.97	171.96
83	62.20	51.02	144	61.30	111.87	205	59.95	172.96
84	62.19	52.02	145	61.28	112.86	206	59.92	173.97
85	62.18	53.02	146	61.26	113.86	207	59.89	174.97
86	62.17	54.01	147	61.24	114.86	208	59.87	175.98
87	62.16	55.01	148	61.22	115.86	209	59.84	176.98
88	62.15	56.01	149	61.20	116.86	210	59.82	177.99
89	62.14	57.00	150	61.18	117.86	211	59.79	178.99
90	62.13	58.00	151	61.16	118.86	212	59.76	180.00
91	62.12	59.00	152	61.14	119.86			
92	62.11	60.00	153	61.12	120.86			



Friction Loss of Water in Pounds Pressure Per Square Inch

For each 100 feet of length in different size clean iron pipe discharging given quantities of water per minute.

Gallons (Imp.) Discharged per minute	½ inch	¾ inch	1 inch	1¼ inch	1½ inch	2 inch	2½ inch	3 inch	3½ inch	4 inch	5 inch	6 inch
	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.
5	29.527	3.961	1.008	.372	.156							
10	115.228	15.604	3.792	1.260	.564	.144						
15		34.448	8.378	2.856	1.164	.324						
20		60.495	14.763	4.885	1.992	.504						
25		93.623	22.805	7.682	3.145		.252	.120				
30			33.008	10.982	4.501	1.092						
35			44.411	14.451	6.061							
40			57.614	19.325	7.826	1.920						
45				24.246	9.782							
50				29.887	12.003	2.928	.972	.420	.192	.109	.036	
75				67.336	26.887	6.385	2.160	.888	.408			
100					46.812	11.355	3.841	1.572	.720	.396	.144	.060
125						17.884	5.869	2.388	1.080			
150						25.446	8.402	3.421	1.584	.828	.300	.120
175						33.728	11.355	4.621	2.136			
200						45.011	14.980	6.025	2.785	1.464	.504	.204
250							23.598	9.314	4.261	2.269	.781	.312
300							33.680	13.443	6.277	3.193	1.116	.444
350								18.244	8.402	4.381	1.536	.600
400								23.406	10.803	5.678	2.016	.780
450								30.007	13.923	7.214	2.521	.972
500								36.969	17.116	8.918	3.241	1.152

Gallons (Imp.) Discharged per Minute	5 inch	6 inch	8 inch	10 inch	12 inch	14 inch	16 inch	18 inch	20 inch	24 inch	30 inch
	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.	Friction Loss in Lbs.
250	.780	.312	.084	.036	.012						
500	3.241	1.152	.300	.108	.048	.020	.010	.006			
750	6.482	2.653	.636	.216	.096						
1,000	11.523	4.657	1.128	.384	.156	.074	.043	.024	.014	.006	.002
1,250			1.752	.588	.240						
1,500			2.509	.840	.348	.162	.085	.048			
1,750				1.140	.456						
2,000				1.476	.588	.281	.148	.085	.050	.024	.007
2,250					.756						
2,500					.924	.435	.226	.128			
3,000					1.332	.618	.320	.180	.109	.056	.014
3,500						.804	.438	.245			
4,000						1.092	.567	.316	.190	.080	.026
4,500							.712	.400			
5,000							.876	.490	.293	.122	.042
6,000								.702	.418	.175	.058
7,000									.567	.235	.078
8,000									.735	.306	.010
9,000										.388	.126
10,000										.475	.136

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## Strength of Bolts

Diam- eter of Bolts  Inches	Number of Threads per Inch	Areas		Tensile Stress			Shearing Stress			
		Full Bolt	Bottom of of Threads	10,000 Lbs. per Sq. Inch	12,500 Lbs. per Sq. Inch	17,500 Lbs. per Sq. Inch	Full Bolt		Bottom of Thread	
							7,500 Lbs. per Sq. Inch	10,000 Lbs. per Sq. Inch	7,500 Lbs. per Sq. Inch	10,000 Lbs. per Sq. Inch
		Sq. Inches	Sq. Inches	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
$\frac{1}{4}$	20	.049	.027	270	340	470	380	490	200	270
$\frac{5}{16}$	18	.077	.045	450	570	790	580	770	340	450
$\frac{3}{8}$	16	.110	.068	680	850	1,190	830	1,100	510	680
$\frac{7}{16}$	14	.150	.093	930	1,170	1,630	1,130	1,500	700	930
$\frac{1}{2}$	12	.196	.120	1,200	1,500	2,100	1,470	1,960	900	1,200
$\frac{5}{8}$	12	.248	.162	1,620	2,030	2,840	1,860	2,480	1,220	1,620
$\frac{3}{4}$	11	.307	.202	2,020	2,520	3,530	2,300	3,070	1,510	2,020
$\frac{7}{8}$	10	.442	.302	3,020	3,770	5,290	3,310	4,420	2,270	3,020
1	9	.601	.419	4,190	5,240	7,340	4,510	6,010	3,150	4,190
	8	.785	.551	5,510	6,890	9,640	5,890	7,850	4,130	5,510
$1\frac{1}{8}$	7	.994	.693	6,930	8,660	12,130	7,450	9,940	5,200	6,930
$1\frac{1}{4}$	7	1.227	.890	8,890	11,120	15,570	9,200	12,270	6,670	8,900
$1\frac{3}{8}$	6	1.485	1.054	10,540	13,180	18,450	11,140	14,850	7,910	10,540
$1\frac{1}{2}$	6	1.767	1.294	12,940	16,170	22,640	13,250	17,670	9,700	12,940
$1\frac{5}{8}$	$5\frac{1}{2}$	2.074	1.515	15,150	18,940	26,510	15,550	20,740	11,360	15,150
$1\frac{3}{4}$	5	2.405	1.745	17,450	21,800	30,520	18,040	24,050	13,080	17,440
$1\frac{7}{8}$	5	2.761	2.049	20,490	25,610	35,860	20,710	27,610	15,370	20,490
2	$4\frac{1}{2}$	3.142	2.300	23,000	28,750	40,250	23,560	31,420	17,250	23,000
$2\frac{1}{4}$	$4\frac{1}{2}$	3.967	3.021	30,210	37,770	52,870	29,820	39,760	22,660	30,210
$2\frac{1}{2}$	4	4.909	3.716	37,160	46,450	65,040	36,820	49,090	27,870	37,160

## Table for Equalizing Pipes

Number of Branches	Size of Main Pipe, Inches												
	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12
2	.758	.985	1.14	1.52	1.89	2.27	2.65	3.03	3.79	4.55	6.06	7.58	9.08
3	.644	.838	.967	1.29	1.61	1.92	2.26	2.58	3.22	3.87	5.16	6.44	7.73
4	.574	.747	.861	1.15	1.44	1.72	2.01	2.30	2.87	3.45	4.59	5.74	6.89
5	.525	.683	.788	1.05	1.31	1.58	1.84	2.10	2.63	3.15	4.20	5.25	6.30
6	.488	.635	.733	.977	1.22	1.47	1.71	1.95	2.44	2.93	3.91	4.88	5.86
7	.459	.597	.689	.918	1.15	1.38	1.61	1.84	2.30	2.75	3.67	4.59	5.51
8	.435	.556	.653	.870	1.09	1.31	1.52	1.74	2.18	2.61	3.48	4.35	5.22
9	.415	.540	.623	.830	1.09	1.25	1.45	1.66	2.08	2.49	3.32	4.15	4.98
10	.398	.518	.597	.796	.995	1.19	1.39	1.59	1.99	2.39	3.18	3.98	4.78
11	.383	.498	.575	.766	.958	1.15	1.34	1.53	1.92	2.30	3.09	3.83	4.60
12	.370	.482	.555	.740	.925	1.11	1.30	1.48	1.85	2.22	2.96	3.70	4.44
13	.358	.466	.538	.717	.896	1.08	1.25	1.43	1.79	2.15	2.87	3.59	4.30
14	.348	.452	.522	.696	.870	1.04	1.22	1.39	1.74	2.09	2.78	3.48	4.18
15	.338	.440	.508	.677	.846	1.02	1.18	1.35	1.69	2.03	2.71	3.38	4.06
16	.330	.428	.494	.660	.825	.989	1.15	1.32	1.65	1.98	2.64	3.30	3.96



## Flow of Compressed Air in Standard Size Pipes

For a drop in pressure of 1 lb. per 1000 feet length  
Cubic Feet Per Minute

Size of Pipe Inches	Actual Internal Diameter Inches	Gauge Pressure				
		60	70	80	90	100
1/2	0.622	0.5183	0.4868	0.4603	0.4378	0.4183
3/4	0.824	1.176	1.104	1.044	0.9929	0.9487
1	1.049	2.367	2.223	2.103	2.000	1.910
1 1/4	1.380	5.211	4.894	4.628	4.402	4.205
1 1/2	1.610	8.096	7.604	7.191	6.838	6.534
2	2.067	16.40	15.40	14.57	13.85	12.94
2 1/2	2.469	24.10	22.63	21.40	20.35	19.45
3	3.068	49.47	46.46	43.94	41.79	39.92
3 1/2	3.548	73.92	69.43	65.66	62.44	59.66
4	4.026	104.5	98.18	92.85	88.30	84.36
5	5.047	193.5	181.8	171.9	163.5	156.2
6	6.065	316.5	297.3	281.1	267.3	255.4
8	7.981	660.8	620.6	586.9	558.1	533.3
10	10.02	1204	1131	1070	1017	971.9
12	12.00	1936	1818	1719	1635	1299
14	14.25	3029	2845	2690	2559	2445
17 O.D.	16.214	4237	3979	3763	3579	3419
18 O.D.	17.182	4923	4624	4372	4158	3973
20 O.D.	19.182	6540	6143	5809	5524	5278
22 O.D.	21.25	8512	7994	7560	7189	6869
24 O.D.	23.25	10824	10072	9643	9170	8762

## Volume of Air Transmitted Through Pipes

Cubic Feet Per Minute

Velocity of Air in Feet per Second	Actual Inside Diameter of Pipe, Inches									
	1	2	3	4	6	8	10	12	16	24
1	0.33	1.31	2.95	5.2	11.8	20.9	32.7	47.1	83.8	188
2	0.65	2.62	5.89	10.5	23.6	41.9	65.4	94.2	167.5	377
3	0.98	3.93	8.84	15.7	35.3	62.8	98.2	141.4	251.3	565
4	1.31	5.24	11.78	20.9	47.1	83.8	131.0	188.0	335.0	754
5	1.64	6.55	14.7	26.2	59.0	104.0	163.0	235.0	419.0	942
6	1.96	7.85	17.7	31.4	70.7	125.0	196.0	283.0	502.0	1131
7	2.29	9.16	20.6	36.6	82.4	146.0	229.0	330.0	586.0	1319
8	2.62	10.50	23.5	41.9	94.0	167.0	262.0	377.0	670.0	1508
9	2.95	11.78	26.5	47.0	106.0	188.0	294.0	424.0	754.0	1696
10	3.27	13.1	29.4	52.0	118.0	209.0	327.0	471.0	838.0	1885
12	3.93	15.7	35.3	63.0	141.0	251.0	393.0	565.0	1005.0	2262
15	4.91	19.6	44.2	78.0	177.0	314.0	491.0	707.0	1256.0	2827
18	5.89	23.5	53.0	94.0	212.0	377.0	589.0	848.0	1508.0	3393
20	6.55	26.2	59.0	105.0	235.0	419.0	654.0	942.0	1675.0	3770
24	7.86	31.4	71.0	125.0	283.0	502.0	785.0	1131.0	2010.0	4524
25	8.18	32.7	73.0	131.0	294.0	523.0	818.0	1178.0	2094.0	4712
28	9.16	36.6	82.0	146.0	330.0	586.0	916.0	1319.0	2346.0	5278
30	9.80	39.3	88.0	157.0	353.0	628.0	982.0	1414.0	2513.0	5655



## Loss of Air Pressure by Friction in Pipes

The table "Loss of Pressure by Friction in Pipes" is based on data published by the B. F. Sturdevant Co., and gives the loss in pressure due to friction of air in pipes 100 feet long. For any other length the loss is proportional to the length.

Velocity Feet per Minute	Diameter of Pipe in Inches								
	1	2	3	4	5	6	8	10	12
	Loss in Ounces per Square Inch per 100 Feet								
600	0.4	0.2	0.13	0.1	0.08	0.07	0.05	0.04	0.03
1200	1.6	0.8	0.53	0.4	0.32	0.27	0.20	0.16	0.13
1800	3.6	1.8	1.20	0.9	0.72	0.60	0.45	0.36	0.30
2400	6.4	3.2	2.13	1.6	1.28	1.07	0.80	0.64	0.53
3000	10.0	5.0	3.33	2.5	2.00	1.67	1.25	1.00	0.83
3600	14.4	7.2	4.80	3.6	2.88	2.40	1.80	1.44	1.20
4200	....	9.8	6.53	4.9	3.92	3.27	2.45	1.96	1.63
4800	....	12.8	8.53	6.4	5.12	4.27	3.20	2.56	2.13
6000	....	20.0	13.33	10.0	8.00	6.67	5.00	4.00	3.33

## Loss of Pressure in Pounds per Square Inch of Air at 80 Pounds Gauge Pressure in 1000 Feet of Pipe (Ingersoll-Rand Co.)

Size of Pipe	Delivery in Cubic Feet of Compressed Air per Minute at 80 Pounds Gauge									
	7.74	11.3	15.2	19.4	23.2	27.2	31.0	38.7	46.5	62.0
	Equivalent Delivery in Cubic Feet of Free Air per Minute									
	50	75	100	125	150	175	200	250	300	400
1	14.31	....	....	....	....	....	....	....	....	....
1 1/4	3.96	8.46	15.31	....	....	....	....	....	....	....
1 1/2	1.53	3.26	5.92	9.64	13.79	....	....	....	....	....
2	0.33	0.71	1.28	2.09	2.99	4.09	5.34	8.32	12.01	....
2 1/2	0.10	0.21	0.39	0.64	0.91	1.25	1.63	2.54	3.67	6.53
3	0.03	0.08	0.14	0.24	0.34	0.47	0.61	0.96	1.38	2.45
3 1/2	0.01	0.03	0.06	0.11	0.15	0.21	0.27	0.43	0.62	1.11
4	....	0.01	0.03	0.05	0.07	0.10	0.13	0.21	0.30	0.54
4 1/2	....	....	0.02	0.03	0.04	0.06	0.07	0.12	0.17	0.30
5	....	....	0.01	0.01	0.02	0.03	0.04	0.07	0.09	0.17
6	....	....	....	....	0.01	0.01	0.01	0.02	0.03	0.06
8	....	....	....	....	....	....	....	....	....	0.01

Size of Pipe	Delivery in Cubic Feet of Compressed Air per Minute at 80 Pounds Gauge									
	77.4	92.9	124.0	152	232	310	387	465	620	774
	Equivalent Delivery in Cubic Feet of Free Air per Minute									
	500	600	800	1000	1500	2000	2500	3000	4000	5000
2 1/2	10.81	....	....	....	....	....	....	....	....	....
3	3.83	5.61	9.86	....	....	....	....	....	....	....
3 1/2	1.73	2.46	4.42	6.64	15.41	....	....	....	....	....
4	0.85	1.22	2.18	3.29	7.62	13.62	....	....	....	....
4 1/2	0.47	0.68	1.19	1.82	4.24	7.58	11.79	....	....	....
5	0.27	0.39	0.69	1.04	2.43	4.32	6.88	9.72	....	....
6	0.10	0.15	0.27	0.40	0.95	1.69	2.64	3.79	6.78	10.55
8	0.02	0.03	0.06	0.09	0.22	0.39	0.60	0.87	1.55	2.46
10	....	0.01	0.02	0.03	0.06	0.12	0.19	0.28	0.49	0.77
12	....	....	0.01	0.01	0.02	0.04	0.07	0.11	0.19	0.30



Inside Diameter of Pipes Required to Transmit Air  
at Given Velocities  
(Buffalo Forge Co.)

Cubic Feet of Air Transmitted per Minute	Velocity of Air, Feet per Minute											
	500	600	800	1000	1200	1500	1800	2000	2500	3000	3500	4000
	Diameter of Pipe, Inches											
200	9	8	7	7	6	6	6	6	6	6	6	6
400	13	11	10	9	8	8	7	7	6	6	6	6
600	15	14	12	11	10	9	8	8	7	7	6	6
800	18	16	14	13	12	10	9	9	8	8	7	7
1000	20	18	16	14	13	12	10	10	9	8	8	7
1200	21	20	17	15	14	13	11	11	10	9	9	8
1400	23	21	18	16	15	14	12	12	11	10	9	9
1600	25	23	20	18	16	15	13	13	11	11	10	9
1800	26	24	21	19	17	16	14	13	12	11	10	10
2000	28	25	22	20	18	16	15	14	13	12	11	10
2200	29	27	23	21	19	17	15	15	13	12	11	11
2400	30	28	24	21	20	18	16	15	14	13	12	11
2600	31	29	25	22	20	18	17	16	15	13	12	11
2800	33	30	26	23	21	19	18	16	15	14	13	12
3000	34	31	27	24	22	20	18	17	15	14	13	12
3200	34	32	28	25	23	20	19	18	15	15	13	13
3400	36	33	28	25	23	21	19	18	16	15	14	13
3600	37	34	29	26	24	21	20	19	16	15	14	13
3800	38	35	30	27	25	22	21	19	17	16	15	14
4000	39	35	31	28	25	22	21	20	18	16	15	14
4200	40	36	32	28	26	23	21	20	18	16	15	14
4400	41	37	32	29	26	24	22	21	18	17	16	15
4600	42	38	33	30	27	24	22	21	19	17	16	15
4800	42	39	34	30	28	25	22	21	19	18	16	15
5000	43	40	34	31	28	25	23	22	20	18	17	16
5200	44	40	35	31	29	25	24	22	20	18	17	16
5400	..	..	35	32	29	26	24	23	21	18	18	16
5600	..	..	36	33	30	27	24	23	21	19	18	17
5800	..	..	37	33	30	27	25	24	21	19	18	17
6000	..	..	38	34	31	28	25	24	21	20	18	17
6200	..	..	38	34	31	28	25	24	21	20	18	17
6400	..	..	39	35	32	28	26	25	22	20	19	18
6600	..	..	39	36	32	29	26	25	22	21	19	18
6800	..	..	40	36	33	29	27	25	23	21	19	18
7000	..	..	40	36	33	30	27	26	23	21	19	18
7200	..	..	41	37	34	30	28	26	23	21	20	19
7400	..	..	41	37	34	30	28	27	24	21	20	19
7600	..	..	42	38	34	31	28	27	24	22	20	19
7800	..	..	43	38	36	31	29	27	24	22	21	19
8000	..	..	43	39	36	32	29	28	25	22	21	20
8200	..	..	..	39	36	32	29	28	25	23	21	20
8400	..	..	..	40	36	33	30	28	25	23	21	20

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## Cubic Feet of Gas Flow in Pipes—Specific Gravity 0.6

Size Pipe	Press. Drop 10th ins.	Length of straight Pipe in Feet												
		10	20	25	30	40	50	60	70	75	80	90	100	125
1"	3	415	300		240	210	190	170	160		150	142	135	125
	5	540	440		325	285	250	225	215		195	185	177	155
	10		560		440	400	300	335	310		290	270	260	235
	15				565	510	440	410	380		355	340	325	295
	20					570	510	465	440		410	395	380	345
	30							580	540		505	480	465	420
1 1/4"	3	850	610		505	430	390	360	340		310	295	285	260
	5	1,125	790		660	570	510	465	440		410	390	375	335
	10		1,135		940	810	725	670	630		590	560	545	485
	15				1,155	1,000	890	820	770		725	685	670	600
	20					1,150	1,020	960	895		835	800	770	700
	30							1,175	1,100		1,030	980	940	860
1 1/2"	3	1,325	940		770	660	600	550	510		475	450	440	395
	5	1,700	1,200		1,000	865	780	720	670		620	600	570	510
	10		1,925		1,450	1,230	1,120	1,040	960		900	855	830	745
	15				1,770	1,550	1,375	1,275	1,175		1,100	1,050	1,015	910
	20					1,760	1,575	1,470	1,370		1,275	1,225	1,170	1,075
	30							1,805	1,675		1,575	1,495	1,450	1,320
2"	3	2,420	1,725		1,430	1,225	1,115	1,025	960		900	850	830	750
	5	3,100	2,225		1,855	1,600	1,450	1,375	1,250		1,175	1,120	1,075	970
	10		3,100		2,635	2,275	2,055	1,900	1,775		1,675	1,575	1,545	1,380
	15				3,210	2,790	2,500	2,325	2,170		2,025	1,950	1,825	1,685
	20					3,220	2,925	2,680	2,500		2,360	2,250	2,160	1,980
	30							3,300	3,080		2,885	2,745	2,650	2,415
2 1/2"	3	3,900	2,800		2,320	2,000	1,800	1,670	1,550		1,450	1,380	1,335	1,225
	5	5,040	3,625		3,000	2,600	2,350	2,175	2,025		1,890	1,810	1,745	1,570
	10		5,150		4,295	3,695	3,340	3,100	2,880		2,700	2,570	2,480	2,240
	15				5,220	4,550	4,050	3,780	3,580		3,300	3,150	3,050	2,750
	20					5,240	4,735	4,400	4,080		3,800	3,650	3,510	3,200
	30							5,150	5,000		4,690	4,475	4,310	3,910
3"	3	7,000	5,610		4,400	3,490	3,145	2,875	2,670		2,480	2,360	2,280	2,040
	5	9,100	6,500		5,300	4,600	4,435	3,780	3,530		3,290	3,140	3,020	2,905
	10		9,300		7,650	6,600	5,900	5,500	5,100		4,800	4,600	4,400	3,900
	15				9,380	8,150	7,300	6,780	6,290		5,860	5,600	5,410	4,880
	20					9,380	8,500	7,860	7,300		6,835	6,480	6,290	5,640
	30							9,650	8,990		8,410	8,000	7,740	6,990
3 1/2"	3	10,350	7,340		6,050	5,190	4,690	4,320	4,035		3,750	3,565	3,445	3,115
	5		9,500		7,880	6,780	6,140	5,670	5,280		4,940	4,685	4,500	4,000
	10					9,740	8,755	8,080	7,540		7,080	6,710	6,510	5,815
	15							9,945	9,245		8,650	8,260	7,960	7,190
	20										10,050	9,580	9,250	8,350
	30													
4"	3		10,200		8,420	7,280	6,580	6,050	5,635		5,250	5,000	4,840	4,355
	5					9,450	8,500	7,880	7,325		6,870	6,550	6,300	5,600
	10										9,800	9,350	9,040	8,090
	15													9,860
	20													
	30													
6"	3			32,000			22,000			18,500			16,000	14,400
	5			41,500			29,200			23,800			20,600	18,500
	10			58,100			41,200			33,800			29,000	26,000
	15			71,500			50,500			41,300			35,800	32,100
	20			82,500			58,000			47,800			41,800	37,000
	30													
8"	3			65,000			46,000			37,800			32,600	29,200
	5			84,000			57,500			48,500			42,000	37,800
	10			118,000			84,000			68,500			59,500	53,000
	15			145,000			99,500			84,000			73,000	65,500
	20			168,000			118,000			97,500			84,000	75,500
	30													
10"	3			116,000			82,000			67,500			58,000	52,000
	5			150,000			106,000			87,000			75,000	67,500
	10			212,000			150,000			122,000			105,000	95,000
	15			260,000			184,000			150,000			130,000	117,000
	20			300,000			212,000			174,000			150,000	134,000
	30													
12"	3			183,000			128,000			105,000			91,500	82,000
	5			234,000			166,000			135,000			117,500	110,000
	10			331,000			235,000			192,000			166,000	148,000
	15			406,000			288,000			236,000			204,000	184,000
	20			470,000			334,000			272,000			236,000	210,000
	30													



# USEFUL ENGINEERING DATA

## Cubic Feet of Gas Flow in Pipes—Specific Gravity 0.6

Size of Pipe	Press. Drop 10th ins	Length of Straight Pipe in Feet													
		150	175	200	250	300	350	400	450	500	600	700	800	900	1000
1"	3	112	100	90		75		62		50	45	40	35		30
	5	140	130	120		100		80		70	65	57	48		40
	10	215	195	180		145		125		110	100	90	80		70
	15	265	240	225		180		155		135	125	110	105		90
	20	310	285	265		215		185		160	145	135	125		105
	30	380	350	330		265		225		200	180	165	155		135
1 1/4"	3	230	210	195		155		135		115	100	90	85		75
	5	305	280	260		205		180		165	140	125	115		100
	10	440	410	380		305		260		230	205	190	175		155
	15	525	450	435		375		325		285	260	235	225		195
	20	630	585	545		440		380		335	305	280	260		230
	30	780	720	670		545		470		420	380	350	325		285
1 1/2"	3	350	325	300		240		205		175	160	140	130		120
	5	455	430	400		315		265		240	215	195	180		150
	10	670	620	580		465		400		350	315	290	270		240
	15	830	770	720		580		490		440	395	360	340		300
	20	950	895	830		670		590		510	460	430	400		350
	30	1,180	1,100	925		875		720		640	565	520	490		430
2"	3	670	625	580		470		410		360	320	300	280		250
	5	880	820	760		610		530		470	420	390	365		320
	10	1,270	1,175	1,085		870		760		670	610	560	525		470
	15	1,545	1,425	1,335		1,075		930		825	760	700	655		590
	20	1,770	1,650	1,550		1,255		1,095		970	880	805	760		670
	30	2,200	2,000	1,890		1,550		1,345		1,200	1,075	1,000	940		825
2 1/2"	3	1,080	1,000	940		735		645		570	500	465	430		385
	5	1,420	1,315	1,225		995		845		740	660	620	570		500
	10	2,025	1,890	1,760		1,415		1,225		1,085	990	910	850		740
	15	2,500	2,310	2,155		1,750		1,500		1,340	1,225	1,120	1,020		950
	20	2,900	2,680	2,500		2,030		1,775		1,570	1,410	1,310	1,225		1,070
	30	3,565	3,290	3,080		2,500		2,180		1,925	1,750	1,600	1,525		1,340
3"	3	1,810	1,665	1,540		1,220		1,025		870	755	665	625		530
	5	2,840	2,450	2,140		1,640		1,385		1,210	1,085	980	900		760
	10	3,600	3,250	3,000		2,840		2,140		1,820	1,640	1,500	1,390		1,225
	15	4,400	4,050	3,800		3,050		2,600		2,290	2,075	1,895	1,770		1,600
	20	5,140	4,740	4,410		3,560		3,050		2,700	2,440	2,240	2,080		1,820
	30	6,350	5,850	5,450		4,410		3,800		3,380	3,050	2,790	2,630		2,290
3 1/2"	3	2,770	2,575	2,375		1,890		1,605		1,400	1,245	1,130	1,050		905
	5	3,660	3,380	3,185		2,500		2,300		1,890	1,690	1,545	1,445		1,245
	10	5,280	4,900	4,550		3,650		3,160		2,780	2,500	2,335	2,150		1,885
	15	6,500	6,000	5,620		4,500		3,910		3,500	3,150	2,850	2,700		2,350
	20	7,550	7,000	6,540		5,290		4,580		4,020	3,660	3,400	3,150		2,775
	30	9,335	8,610	8,050		6,550		5,660		5,000	4,500	4,195	3,955		3,450
4"	3	3,905	3,610	3,385		2,720		2,285		2,000	1,790	1,655	1,560		1,350
	5	5,195	4,760	4,400		3,145		3,010		2,870	2,670	2,400	2,100		1,800
	10	7,380	6,810	6,350		5,120		4,400		3,900	3,550	3,280	3,050		2,690
	15	9,080	8,400	7,860		6,325		5,450		4,810	4,360	4,000	3,740		3,360
	20		9,700	9,550		7,375		6,365		5,610	5,140	4,750	4,400		3,880
	30					9,050		7,850		6,990	6,300	5,820	5,500		4,820
6"	3	13,000	12,100	11,300	10,100	9,250	8,550	8,000	7,550	7,150	6,500	6,050	5,650	5,300	5,100
	5	16,800	15,600	14,600	13,000	11,900	11,000	10,300	9,750	9,250	8,400	7,800	7,400	6,800	6,500
	10	23,900	22,000	20,600	18,400	16,400	15,500	14,500	13,700	13,050	11,900	11,000	10,300	9,750	9,250
	15	29,000	27,000	25,300	22,600	20,600	19,200	17,900	16,800	15,900	14,600	13,500	12,600	11,500	11,200
	20	33,800	31,000	29,200	26,000	23,800	22,000	20,600	19,400	18,400	16,800	15,600	14,500	13,700	13,000
8"	3	25,800	24,600	23,000	20,600	18,700	17,400	16,300	15,300	14,500	13,300	12,300	11,500	10,800	10,300
	5	34,400	31,800	29,800	26,600	24,000	22,500	21,000	19,800	18,800	17,200	15,900	14,800	14,000	13,500
	10	48,500	45,000	42,000	37,600	33,200	31,800	29,600	28,000	26,600	24,200	21,900	21,000	19,800	18,700
	15	59,500	55,000	51,500	46,000	42,000	39,000	37,400	34,200	32,500	29,800	27,500	25,700	24,200	23,000
	20	69,000	63,500	59,500	53,200	48,500	45,000	42,000	39,600	37,500	34,400	30,800	29,600	28,000	26,600
10"	3	47,500	44,000	41,000	36,800	33,600	31,000	29,000	27,400	26,000	23,700	21,900	20,300	19,400	18,400
	5	61,000	56,800	53,000	47,500	46,500	40,000	37,500	35,500	33,600	30,600	28,400	26,600	25,000	23,600
	10	87,000	80,000	75,000	67,000	60,000	56,500	53,000	50,000	47,500	43,300	40,000	37,500	35,300	33,600
	15	105,000	97,000	95,000	82,000	75,000	70,000	65,000	61,500	58,000	53,000	49,000	46,000	42,000	41,000
	20	122,000	113,000	105,000	95,000	87,000	80,500	75,000	70,500	67,000	61,000	57,000	53,000	50,000	47,500
12"	3	74,500	69,000	64,500	57,700	52,500	48,500	45,500	43,000	40,700	37,200	34,400	32,300	30,400	28,800
	5	96,000	89,000	83,500	74,500	67,000	63,000	59,000	55,500	52,700	48,000	44,500	41,500	39,200	37,200
	10	136,000	125,000	117,000	105,000	94,000	89,000	83,060	78,500	74,500	68,000	63,000	58,800	55,500	52,500
	15	166,000	154,000	144,000	128,000	117,000	109,000	102,000	96,500	91,000	83,500	77,000	72,000	68,000	64,500
	20	192,000	177,000	166,000	148,000	135,000	125,000	117,000	110,000	105,000	96,000	89,000	83,000	78,800	74,500



## Tensile Strengths of Metals Cast and Rolled

METAL	Pounds per Square Inch	METAL	Pounds per Square Inch
Aluminum, Cast.....	15,000	Iron Cupola Malleable.....	40,000
Aluminum Bars.....	28,000	Iron, Wrought Shapes.....	48,000
Brass, Cast, Yellow.....	27,000	Lead, Cast.....	1,600-2,400
Brass, Rod.....	55,000	Monel, Cast.....	65,000
Brass, Rolled, Naval. {1" and below.....	62,000	Monel, Rolled {1" and below.....	84,000
{Above 1" to 2½".....	60,000	{Above 1" to 2½".....	80,000
Bronze, Cast, Steam.....	30,000-36,000	{Above 2½".....	75,000
Bronze, Cast, Manganese.....	65,000	Nickel, Cast.....	85,000
{1" and below.....	72,000	Nickel, Rolled.....	96,000
Bronze, Rolled Mang. {Above 1".....	70,000	{Hard.....	80,000
Bronze, Cast, Phosphor.....	30,000-40,000	{Medium.....	70,000
{1½" and below.....	80,000	{Soft.....	60,000
Bronze, Rolled, Phos. {Above ½" to 1".....	60,000	Steel Cast.....	75,000-90,000
{Above 1".....	55,000	Steel Forgings.....	100,000-105,000
Iron, Cast, Gray {Light castings.....	18,000	Steel, 3.5% Nickel.....	4,000-5,000
{Medium castings.....	21,000	Tin, Cast.....	4,000-6,000
{Heavy castings.....	24,000	Zinc, Cast.....	

## Wire and Metal Gauges (Dimensions in Decimal Parts of an Inch)

Number of Wire Gauge	American or Brown & Sharpe	Birmingham or Stubs' Iron Wire	Roebbling's and Washburn & Moen's	British Imperial Standard Wire Gauge	Stubs' Steel Wire	U. S. Standard for Plate	Washburn & Moen Music Wire	Number of Wire Gauge
00000000							.0083	00000000
0000000			.4900	.5000		.5000	.0087	0000000
000000			.4600	.4640		.4687	.0095	000000
00000			.4300	.4320		.4375	.0100	00000
0000	.4600	.454	.3938	.4000		.4062	.0110	0000
000	.4096	.425	.3625	.3720		.3750	.0120	000
00	.3648	.380	.3310	.3480		.3437	.0133	00
0	.3249	.340	.3065	.3240		.3125	.0144	0
1	.2893	.300	.2830	.3000	.227	.2812	.0156	1
2	.2576	.284	.2625	.2760	.219	.2656	.0166	2
3	.2294	.259	.2437	.2520	.212	.2500	.0178	3
4	.2043	.238	.2253	.2320	.207	.2344	.0188	4
5	.1819	.220	.2070	.2120	.204	.2187	.0202	5
6	.1620	.203	.1920	.1920	.201	.2031	.0215	6
7	.1443	.180	.1770	.1760	.199	.1875	.0230	7
8	.1285	.165	.1620	.1600	.197	.1719	.0243	8
9	.1144	.148	.1483	.1440	.194	.1562	.0256	9
10	.1019	.134	.1350	.1280	.191	.1406	.0270	10
11	.0907	.120	.1205	.1160	.188	.1250	.0284	11
12	.0808	.109	.1055	.1040	.185	.1094	.0296	12
13	.0720	.095	.0915	.0920	.182	.0937	.0314	13
14	.0641	.083	.0800	.0800	.180	.0781	.0326	14
15	.0571	.072	.0720	.0720	.178	.0703	.0345	15
16	.0508	.065	.0625	.0640	.175	.0625	.0360	16
17	.0453	.058	.0540	.0560	.172	.0562	.0377	17
18	.0403	.049	.0475	.0480	.168	.0500	.0395	18
19	.0360	.042	.0410	.0400	.164	.0437	.0414	19
20	.0320	.035	.0348	.0360	.161	.0375	.0434	20
21	.0285	.032	.0317	.0320	.157	.0344	.0460	21
22	.0253	.028	.0286	.0280	.155	.0312	.0483	22
23	.0226	.025	.0258	.0240	.153	.0281	.0515	23
24	.0201	.022	.0230	.0220	.151	.0250	.0550	24
25	.0179	.020	.0204	.0200	.148	.0219	.0586	25
26	.0159	.018	.0181	.0180	.146	.0187	.0626	26
27	.0142	.016	.0173	.0164	.143	.0172	.0658	27
28	.0126	.014	.0162	.0149	.139	.0156	.0720	28
29	.0113	.013	.0150	.0136	.134	.0141	.0760	29
30	.0100	.012	.0140	.0124	.127	.0125	.0800	30
31	.0089	.010	.0132	.0116	.120	.0109		31
32	.0079	.009	.0128	.0108	.115	.0102		32
33	.0071	.008	.0118	.0100	.112	.0094		33
34	.0063	.007	.0104	.0092	.110	.0086		34
35	.0056	.005	.0095	.0084	.108	.0078		35
36	.0050	.004	.0090	.0076	.106	.0070		36
37	.0044			.0068	.103	.0066		37
38	.0040			.0060	.101	.0062		38
39	.0035			.0052	.099			39
40	.0031			.0048	.097			40
41				.0044	.095			41
42				.0040	.092			42
43				.0036	.088			43
44				.0032	.085			44
45				.0028	.081			45
46				.0024	.079			46
47				.0020	.077			47
48				.0016	.075			48
49				.0012	.072			49
50				.0010	.065			50



## Weights of Square and Round Bars of Wrought Iron

IRON WEIGHING 480 LBS. PER CUBIC FOOT. FOR STEEL ADD 2 PER CENT.

TAKEN FROM KENT'S MECHANICAL ENGINEERS' POCKET-BOOK.

Thickness or Diameter in Inches	Weight of Square Bar One Foot Long	Weight of Round Bar One Foot Long	Thickness or Diameter in Inches	Weight of Square Bar One Foot Long	Weight of Round Bar One Foot Long	Thickness or Diameter in Inches	Weight of Square Bar One Foot Long	Weight of Round Bar One Foot Long
	Lbs. Per Foot	Lbs. Per Foot		Lbs. Per Foot	Lbs. Per Foot		Lbs. Per Foot	Lbs. Per Foot
$\frac{1}{16}$	.013	.010	$2\frac{3}{4}$	25.21	19.80	$5\frac{7}{16}$	98.55	77.40
$\frac{1}{8}$	.052	.041	$2\frac{13}{16}$	26.37	20.71	$5\frac{1}{2}$	100.8	79.19
$\frac{3}{16}$	.117	.092	$2\frac{7}{8}$	27.55	21.64	$5\frac{9}{16}$	103.1	81.00
$\frac{1}{4}$	.208	.164	$2\frac{15}{16}$	28.76	22.59	$5\frac{5}{8}$	105.5	82.83
$\frac{5}{16}$	.326	.256	3	30.00	23.56	$5\frac{11}{16}$	107.8	84.69
$\frac{3}{8}$	.469	.368	$3\frac{1}{16}$	31.26	24.55	$5\frac{3}{4}$	110.2	86.56
$\frac{7}{16}$	.638	.501	$3\frac{1}{8}$	32.55	25.57	$5\frac{13}{16}$	112.6	88.45
$\frac{1}{2}$	.833	.654	$3\frac{3}{16}$	33.87	26.60	$5\frac{7}{8}$	115.1	90.36
$\frac{9}{16}$	1.055	.828	$3\frac{1}{4}$	35.21	27.65	$5\frac{15}{16}$	117.5	92.29
$\frac{5}{8}$	1.302	1.023	$3\frac{5}{16}$	36.58	28.73	6	120.0	94.25
$1\frac{1}{16}$	1.576	1.237	$3\frac{3}{8}$	37.97	29.82	$6\frac{1}{8}$	125.1	98.22
$\frac{3}{4}$	1.875	1.473	$3\frac{7}{16}$	39.39	30.94	$6\frac{1}{4}$	130.2	102.3
$1\frac{1}{16}$	2.201	1.728	$3\frac{1}{2}$	40.83	32.07	$6\frac{3}{8}$	135.5	106.4
$\frac{7}{8}$	2.552	2.004	$3\frac{9}{16}$	42.30	33.23	$6\frac{1}{2}$	140.8	110.6
$1\frac{5}{16}$	2.930	2.301	$3\frac{5}{8}$	43.80	34.40	$6\frac{5}{8}$	146.3	114.9
1	3.333	2.618	$3\frac{11}{16}$	45.33	35.60	$6\frac{3}{4}$	151.9	119.3
$1\frac{1}{16}$	3.763	2.955	$3\frac{3}{4}$	46.88	36.82	$6\frac{7}{8}$	157.6	123.7
$1\frac{1}{8}$	4.219	3.313	$3\frac{13}{16}$	48.45	38.05	7	163.3	128.3
$1\frac{3}{16}$	4.701	3.692	$3\frac{7}{8}$	50.05	39.31	$7\frac{1}{8}$	169.2	132.9
$1\frac{1}{4}$	5.208	4.091	$3\frac{15}{16}$	51.68	40.59	$7\frac{1}{4}$	175.2	137.6
$1\frac{5}{16}$	5.742	4.510	4	53.33	41.89	$7\frac{3}{8}$	181.3	142.4
$1\frac{3}{8}$	6.302	4.950	$4\frac{1}{16}$	55.01	43.21	$7\frac{1}{2}$	187.5	147.3
$1\frac{7}{16}$	6.888	5.410	$4\frac{1}{8}$	56.72	44.55	$7\frac{5}{8}$	193.8	152.2
$1\frac{1}{2}$	7.500	5.890	$4\frac{3}{16}$	58.45	45.91	$7\frac{3}{4}$	200.2	157.2
$1\frac{9}{16}$	8.138	6.392	$4\frac{1}{4}$	60.21	47.29	$7\frac{7}{8}$	206.7	162.4
$1\frac{5}{8}$	8.802	6.913	$4\frac{5}{16}$	61.99	48.69	8	213.3	167.6
$1\frac{11}{16}$	9.492	7.455	$4\frac{3}{8}$	63.80	50.11	$8\frac{1}{4}$	226.9	178.2
$1\frac{3}{4}$	10.21	8.018	$4\frac{7}{16}$	65.64	51.55	$8\frac{1}{2}$	240.8	189.2
$1\frac{13}{16}$	10.95	8.601	$4\frac{1}{2}$	67.50	53.01	$8\frac{3}{4}$	255.2	200.4
$1\frac{7}{8}$	11.72	9.204	$4\frac{9}{16}$	69.39	54.50	9	270.0	212.1
$1\frac{15}{16}$	12.51	9.828	$4\frac{5}{8}$	71.30	56.00	$9\frac{1}{4}$	285.2	224.0
2	13.33	10.47	$4\frac{11}{16}$	73.24	57.52	$9\frac{1}{2}$	300.8	236.3
$2\frac{1}{16}$	14.18	11.14	$4\frac{3}{4}$	75.21	59.07	$9\frac{3}{4}$	316.9	248.9
$2\frac{1}{8}$	15.05	11.82	$4\frac{13}{16}$	77.20	60.63	10	333.3	261.8
$2\frac{3}{16}$	15.95	12.53	$4\frac{7}{8}$	79.22	62.22	$10\frac{1}{4}$	350.2	275.1
$2\frac{1}{4}$	16.88	13.25	$4\frac{15}{16}$	81.26	63.82	$10\frac{1}{2}$	367.5	288.6
$2\frac{5}{16}$	17.83	14.00	5	83.33	65.45	$10\frac{3}{4}$	385.2	302.5
$2\frac{3}{8}$	18.80	14.77	$5\frac{1}{16}$	85.43	67.10	11	403.3	316.8
$2\frac{7}{16}$	19.80	15.55	$5\frac{1}{8}$	87.55	68.76	$11\frac{1}{4}$	421.9	331.3
$2\frac{1}{2}$	20.83	16.36	$5\frac{3}{16}$	89.70	70.45	$11\frac{1}{2}$	440.8	346.2
$2\frac{9}{16}$	21.89	17.19	$5\frac{1}{4}$	91.88	72.16	$11\frac{3}{4}$	460.2	361.4
$2\frac{5}{8}$	22.97	18.04	$5\frac{5}{16}$	94.08	73.89	12	480.0	377.0
$2\frac{11}{16}$	24.08	18.91	$5\frac{3}{8}$	96.30	75.64			



## Comparison of Metric and Customary Units

UNIT	English Measure	Metric Measure	Metric to English Multiply by	English to Metric Multiply by
LENGTH	Inch	Millimeter	.03937	25.4001
	Inch	Centimeter	.3937	2.54001
	Foot	Meter	3.28083	.304801
	Yard	Meter	1.093611	.914402
	Mile	Kilometer	.62137	1.60935
AREA	Square Inch	Square Millimeter	.00155	645.16
	Square Inch	Square Centimeter	.1550	6.452
	Square Foot	Square Meter	10.764	.09290
	Square Yard	Square Meter	1.1960	.8361
	Square Mile	Square Kilometer	.3861	2.5900
	Acre	Hectare	2.471	.4047
VOLUME	Cubic Inch	Cubic Millimeter	.000061	16,387.2
	Cubic Inch	Cubic Centimeter	.0610	16.3872
	Cubic Foot	Cubic Meter	35.314	.02832
	Cubic Yard	Cubic Meter	1.3079	.7646
CAPACITY	Fluid Ounce	Milliliter (CC.)	.03524	28.375
	Fluid Dram	Milliliter (CC.)	.28192	3.547
	Quart (Imp.)	Milliliter (CC.)	.8806	1.1356
	Gallon (Imp.)	Liter	.2201	4.5426
	Peck	Liter	.1101	9.0852
	Peck	Dekaliter	1.1007	.9085
	Bushel	Hectoliter	2.7517	.3634
WEIGHT OR MASS	Grain—Avoir.	Gram	15.4324	.06480
	Ounce—Avoir.	Gram	.03527	28.3495
	Ounce—Troy	Gram	.03215	31.10348
	Pound—Avoir.	Kilogram	2.20462	.45359
	Pound—Troy	Kilogram	2.67923	.37324
	Ton—Long	Metric Ton	.98421	1.01605
	Ton—Short	Metric Ton	1.10231	.9718

## Specific Gravity of Liquids

Liquid	Specific Gravity	Liquid	Specific Gravity	Liquid	Specific Gravity
Acetic acid.....	1.051	Gasoline.....	0.70	Phosphoric acid....	1.75
Alcohol, commercial.	0.83	Kerosene.....	0.80	Rape oil.....	0.92
Alcohol, absolute....	0.7935	Linseed oil.....	0.94	Sulphuric acid.....	1.84
Ammonia.....	0.90	Mineral oil.....	0.92	Tar.....	1.00
Benzine.....	0.69	Muriatic acid.....	1.19	Turpentine.....	0.87
Bromine.....	2.97	Naphtha.....	0.76	Vinegar.....	1.08
Carbolic acid.....	1.07	Nitric acid.....	1.42	Water.....	1.00
Carbon disulphide...	1.26	Olive oil.....	0.92	Water, sea.....	1.03
Cotton-seed oil,....	0.93	Palm oil.....	0.95	Whale oil.....	0.92
Ether, sulphuric....	0.72	Petroleum oil.....	0.82		



## Miscellaneous Information

To find the circumference of a circle multiply the diameter by 3.1416 or  $3\frac{1}{4}$ .

To find the diameter of a circle multiply the circumference by .31831.

To find the area of a circle multiply the square of the diameter by .7854 or the square of the radius by 3.1416.

To find the side of an equal square multiply the diameter by .8862.

Doubling the diameter of a pipe increases its capacity four times.

To find the pressure in pounds per square inch of a column of water multiply the head in feet by .4331.

To find the area of an ellipse multiply the large diameter by the small diameter and this by .7854.

To find the area of a ring subtract the square of the small diameter from the square of the large diameter and multiply this by .7854.

To find the volume of a cone multiply the square of the diameter by the height, this by .7854 and then divide by three.

## Miscellaneous Units of Length

1-mil = 0.001 inch.

1-hand = 4 inches.

1-span = 9 inches.

1-fathom = 6 feet.

1-link = 0.66 feet.

1-rod = 25 links.

1-Surveyor's or Gunter's chain = 100 feet.

1-knot (nautical mile) = 1.1516 statute miles.

1-furlong = 40 rods.

1-pole (British) = 5.5 yards.

1-British fathom = 6.08 feet.

1-toise = 6 Paris feet.

1-Paris foot (pied) = 12 Paris inches.

12-Paris inches = 0.324839 meter.

1-Paris line (ligne) = 0.225583 centimeter.

1-Light year =  $5.9 \times 10^{12}$  miles.

1-point (type size) =  $\frac{1}{72}$  or 0.08333 inch

1-cubit = 18 inches.

## Hydraulic Equivalents.

1 Imperial gallon = 277.274 cubic inches.

1 Imperial gallon = 0.16045 cubic foot.

1 Imperial gallon = 10 pounds.

A cubic foot of sea water = 64.00 pounds.

A cubic inch of sea water = 0.037037 pound

A cubic foot of water = 62.32 pounds.

A cubic inch of water = 0.3616 pound.

A cylindrical foot of water = 48.96 pounds.

A cylindrical inch of water = 0.0284 pound.

A column of water 12 in. long 1 in. square = 0.434 pound.

A column of water 12 in. long 1 in. diameter = 0.340 pound.

The capacity of a 12 in. cube = 6.232 gallons.

The capacity of a 1 in. square 1 ft. long = 0.0434 gallon.

The capacity of a 1 ft. diameter 1 ft. long = 4.896 gallons.

The capacity in gallons of a cylinder 1 yd. long = 0.1 diameter, squared.

The capacity of a 1 in. diameter 1 ft. long = 0.034 gallon.

The capacity of a cylindrical inch = 0.002832 gallon.

The capacity of a cubic inch = 0.003606 gallon

The capacity of a sphere 12 in. diameter = 3.263 gallons.

The capacity of a sphere 1 in. diameter = 0.00188 gallon.

1 Imperial gallon = 1.2 United States gallons.

1 Imperial gallon = 4.543 litres of water.

1 United States gallon = 231.0 cubic inches.

1 United States gallon = 0.83 Imperial gallons.

1 United States gallon = 3.8 litres of water.

1 cubic foot of water = 6.232 Imperial gallons.

1 cubic foot of water = 7.476 United States gallons.

1 cubic foot of water = 28.375 litres of water.

1 litre of water = 0.22 Imperial gallon.

1 litre of water = 0.264 United States gallon.

1 litre of water = 61.0 cubic inches.

1 litre of water = 0.0353 cubic foot.



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# JENKINS BROS., LIMITED

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